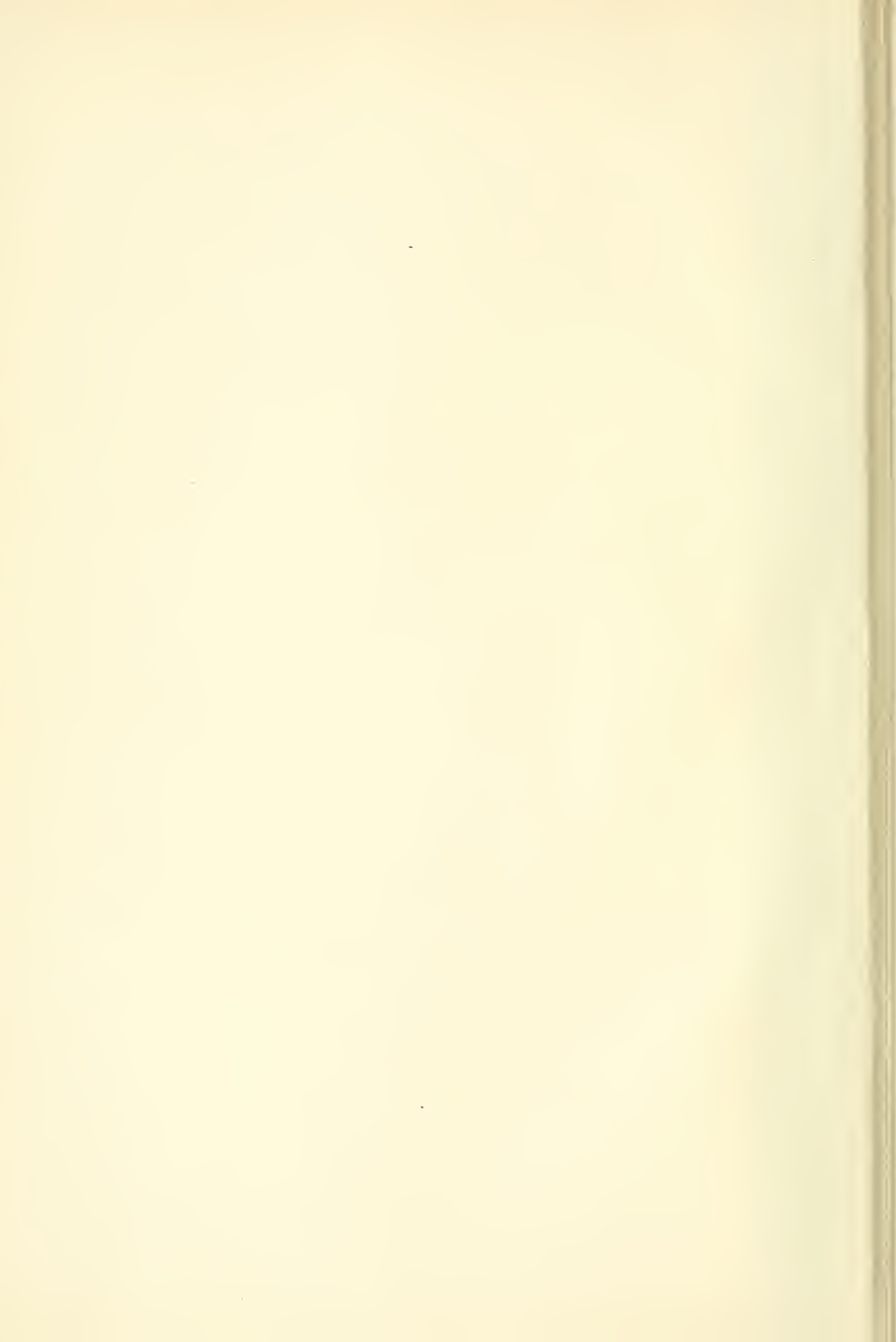
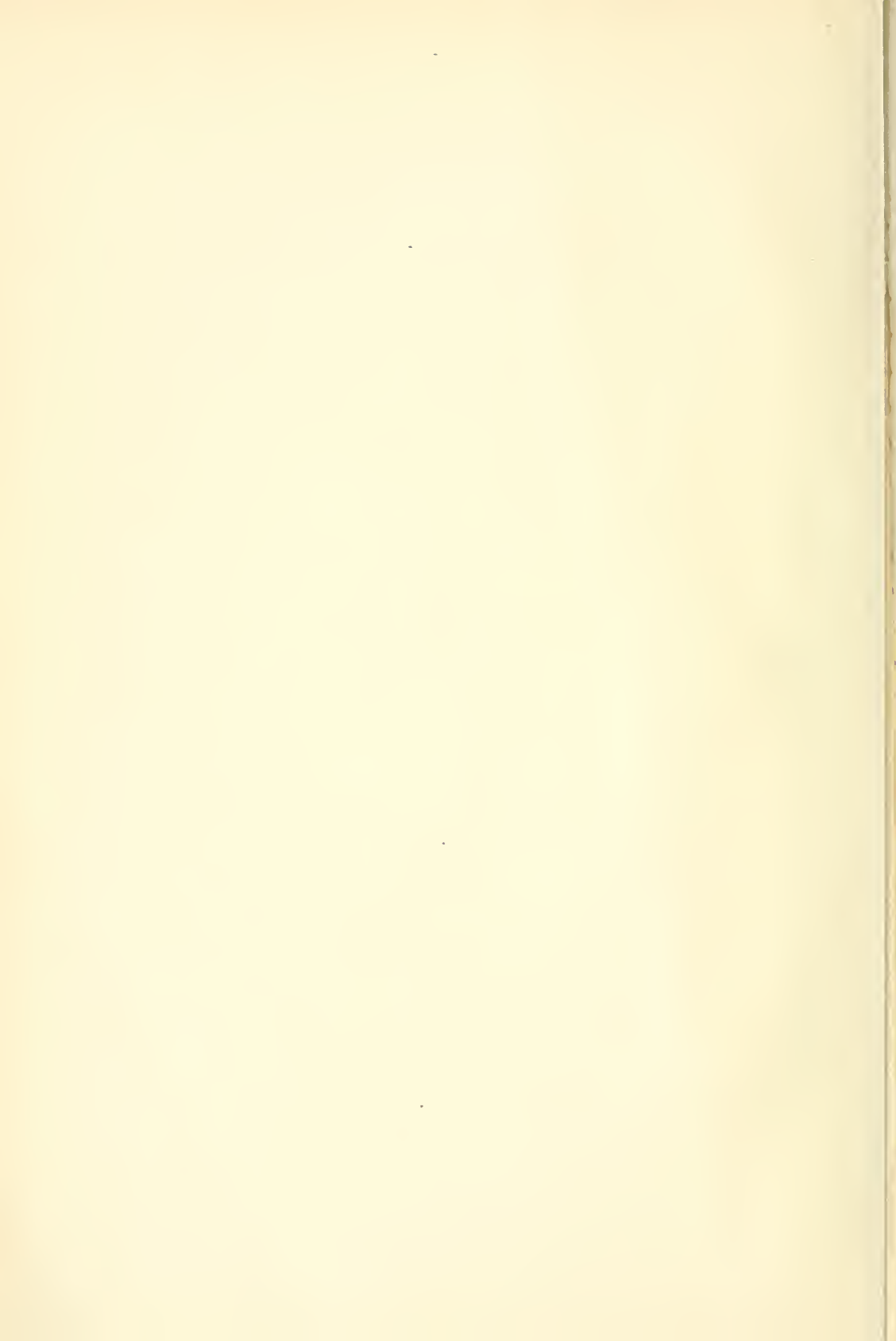


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111
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No. 1

Original Communications.

XANTHOMA TUBERCULATUM, REPORT OF A CASE, WITH REMARKS ON A NEW AND SUCCESSFUL MODE OF TREATMENT.

BY

PRINCE A. MORROW, M.D.

IN his recent work on "Diseases of the Skin," Crocker says, "In xanthoma multiplex of those above puberty there are probably not above 40 cases on record." Without examining into the completeness of the statistics upon which this observation is based, it may be said that cases which fall under the general designation of xanthoma multiplex are not of sufficient rarity in medical literature to merit special mention.

The case which forms the subject of this notice presented certain rare and unusual features which seem to me of sufficient interest to justify its being placed on record. These features related to the character and consistence of the lesions, their localization and peculiar grouping, the presence of certain subjective sensations not commonly met with in this disease and finally, of especial interest from a practical point, the successful removal of the growths by a new method of treatment.

The patient A. H. C. æt 45, was referred to me by Dr. E. G. Janeway of this city, October 15, 1892. I can not better preface the description of the case than by a brief history of the development of the trouble given in the patient's own words.

"The disease first made its appearance in the Spring of 1889. I first felt severe pain on the outside and in the bottom of the left foot; pain continued for about three months in this foot, then commenced in the heel of right foot; some time after this, or about seven months after I first felt any pain, small hard

bunches formed underneath the skin on bottom of both feet, and on the heels; pain continued without cessation, accompanied by burning sensation; feet became stiff and numb, felt like sticks and it was with difficulty I could stand, or walk; pain often worse at night than during the day.

"Wherever there was pressure from the shoes or any irritation, bunches would become inflamed and sore, and discharge thin yellowish matter and blood. The under side of big toe and the inside and end of small toe were sore for six or seven months without healing. no pain in joints or ankle.

"Bunches of the same kind as those on the feet appeared on both knees about nine months from the time of commencement of disease, increased in number until they covered the knees but were not painful.

"About a year and a half ago bunches of same kind formed on back of left hand, perhaps ten in number and disappeared gradually in three months or more without treatment; these never caused any pain or inconvenience except numbness in the fingers.

"Bunches did not appear on surface all at once, but gradually increased in number until they were as you now see them." The patient further stated that his general health had always been good and that he had never suffered from any liver trouble. He had been for a long time practically incapacitated for business on account of the pain and difficulty attending any attempt at standing or walking.

Upon removing his shoes and stockings there was seen a peculiarly grouped eruption of pale yellow nodules, hard and shotty to the feel and deeply set in the skin. The accompanying chromo-lithograph gives an accurate picture of the appearance of the eruption, although, on account of the reduction in size, the lesions appear less distinctly defined and more blended; the yellowish tint is perhaps a little too accentuated. The eruption on the sides and back of the heels and in other localities, presently to be referred to, could not be shown in the picture from the point of view from which it was taken.

The lesions varied in size from a millet seed to that of popcorn, they were rounded or globular in outline, except where closely aggregated in patches, they were compressed into a somewhat angular or oval shape. They were deeply imbedded in the skin, not projecting above the *niveau*, except in the two patches seen on the outer border of the soles about the middle of the instep where they protruded forming veritable nodosities or hard "bunches" which could be grasped by the fingers. Likewise on

the outer rim and back of the heels they were closely aggregated in large numbers forming protuberant brawny masses. These extended up half an inch, in some places an inch or more, on the back of the heels. Under the free edge of the nail on the middle toe of left foot there was an agglomeration of the neoplasms distinctly elevated, presenting the appearance of seed warts. Isolated growths were seen under the free edges of other nails. The growths were for the most part grouped in roundish patches, in some places forming crescents or complete circles, as seen on the outer border of the right heel; over the back of the heels a polycyclic arrangement was noted.

The color of the lesions was a pinkish yellow, or rather a pale yellow suffused with red, like brick-dust, the reddish tinge being most marked over the patches. This brick-dust tint was found to be due to the unusual development of minute telangiectases, or tufts of fine vessels over the growths which masked their real color. When the blood was pressed out of the capillaries, the pale yellowish tint peculiar to the growths asserted itself. This angiomatous element was equally marked in the eruption over the knees.

The consistence of the growths was exceedingly hard and corneous; in marked contrast to the soft yielding character of xanthomatous growths in general. This was not an accident of locality, since the growths on the knees were likewise hard and shotty to the feel. It was doubtless due to the excessive development of connective tissue elements. The epidermis over most of the growths was tense, glistening, and evidently thinned; over some of the patches most subjected to pressure it was broken and detached, showing the parts beneath exposed and bleeding, or covered with scabs of dried secretion mixed with blood.

A number of these open sores were seen, notably a large one on the ball of the right great toe, and another at the root of the left little toe, which were excoriated and bleeding. Both of these had been ulcerated and exceedingly painful for several months, showing no disposition to heal.

On the left great toe is seen a whitish cicatrix, which marks the site of two lesions which have undergone involution by a slow process of ulceration.

Some of the protuberant isolated lesions bore a marked resemblance to milia, and looked as if they could be readily shelled out. Free bleeding followed the incisions, which showed underneath shining yellow growths, from which little bits of tissue

could be scraped or detached, but the mass of the growth remained firmly imbedded.

There was an eruption of similar growths over the extensor surfaces of both knees, most of them isolated, others grouped without form or order. They numbered, perhaps, 150 over the right knee—and about half as many on the left. They were distinctly globular in shape, and excessively hard and unyielding to the touch. No other portion of the surface of the body or visible mucous membranes was invaded by the growths. If the lesions on the backs of the hands were, as described by the patient, of the same general character, they had disappeared without leaving a trace.

Ordinarily, the diagnosis of xanthoma presents little difficulty—the *color* of the lesions is usually pathognomonic. While it would hardly be a safe diagnostic rule to call everything yellow xanthoma, yet the color, taken in connection with the soft consistence of the growths, their predilection for certain regions, and the pathological coincidences such as jaundice, or other symptoms of liver disorder, constitute a clinical picture sufficiently typical to be recognized at a glance.

When this patient first came under observation, while recognizing the color characteristics of xanthoma, I was not clear as to its nature. The diagnosis of xanthoma was contravened by the peculiar grouping of the eruption, its absence from the regions of predilection, and above all, by the excessive induration and solidity of the growths. That this was not due to anatomical peculiarities of the tissues, thickness of the epidermis, etc., was evident, from the fact that the same hard consistence was equally marked in the growths over the knees where no such cause could be alleged. Again there was a most extraordinary development of tufted capillaries over the surface, imparting a reddish tint so pronounced as to suggest an artificial coloration, and led me to ask the patient, on his first visit, whether he had recently worn red stockings. Further, there was no evidence of biliary derangement; no sugar nor bile in the urine; no icteric tint, no structural changes discoverable by careful palpation of the organ—the patient declaring that he had never had any symptoms which could be referred to disorder of the liver. Moreover, the subjective sensations complained of by the patient were unusual, to say the least, in xanthoma—a history of intense pain, preceding by several months the development of any eruptive element, the pain persisting more or less constantly ever since, and being pronounced, not only when the growths

were subjected to pressure in standing or walking, but at night, when they were relieved from all exposure to irritation.

On the patient's second visit two of the growths, one from the inner side of the left sole, the other from the right knee, were excised and submitted to Dr. Fordyce for microscopical examination—the result of which cleared up any doubt as to the xanthomatous nature of the disease.

Most text book writers recognize only two forms of xanthoma—*X. planum* and *X. tuberosum*. I have preferred to use the term *tuberculatum* as more correctly descriptive of the lesions in this case. *X. tuberosum* should, in my opinion, be limited in its application to that variety in which the nodosities attain the size of veritable tumors and are, for the most part, subcutaneously situated.

By all authorities excision with the knife or curette is regarded as the only treatment for xanthoma. When the growths are few in number and favorably situated, this method of treatment is available but when, as in this case, they were several hundred in number and so densely massed, as they were about the heels, their removal by a cutting operation was manifestly impracticable.

The treatment I employed in this case was tentative at first, and purely empirical. I first covered a circumscribed area along the inner side of the left heel, where the growths seemed to be most superficial, with a strip of 20 per cent. salicylic acid plaster, which was worn for several days; when the epidermis was thoroughly disintegrated the plaster was removed bringing the epidermis with it and also a number of the xanthoma tubercles. Others were so softened and separated from their attachments that they could be readily lifted or dug out with a falciform curved curette. The pit-like depressions showing the sites of a dozen or more of the lesions are seen in the colored picture which was made the day after the plaster was removed.

By my advice the patient went to his home in the western part of the State and returned two or three weeks later. I deemed it advisable to wait a certain period in order to determine whether there was any tendency to the re-development of the growths. Upon his return examination showed the result to be in every way satisfactory.

Having demonstrated the practicability of this method of treatment I employed it over the entire surface of the soles, occupied by the eruption, carefully cutting the plaster so that it would just cover the affected areas. I now used a 25 per cent.

plaster and in some instances sprinkled a little pure salicylic acid over its surface with a view of energizing its action.

The growths seemed to lie in different strata of the corium. After a single application of the plaster, worn from three to five days, the more superficial ones were readily removed, others situated more deeply were softened and could be dug out leaving a bleeding base, while those more deeply seated showed a still intact covering.

After removal of the plaster and all the exposed and loosened growths, the patient was directed to soak his feet in hot water and apply a dressing of lint covered with diachylon ointment for a day or two, when the plaster was re-applied. There was some slight irritation but no pain or marked inflammatory reaction from the plaster.

The painful ulceration which had existed on the ball of the left toe for more than nine months entirely healed and the patient declared at each visit that he felt more comfortable than for months previous. The plaster has not been applied to the growths over the knees for the reason that their presence occasions no pain or inconvenience, but I have no doubt of its equal efficacy here.

The results of two weeks' continuous treatment may be briefly summed up as follows: Fully two-thirds of the growths have been entirely removed,¹ the more deeply seated ones are still visible, but the indications are, that they, too, will yield to the penetrating action of the acid, since, when continuously applied it seems to search out and disorganize the xanthomatous nodules. The remarkable reducing action of salicylic acid upon the epidermal structures is well known and it would seem from my observation that it exerts a somewhat similar selective action upon the xanthomatous tissue elements.

Certainly this painless procedure has accomplished all that could possibly have been effected by extirpation of the growths, to say nothing of the contractile scars which would inevitably have followed extensive excisions in this region.

In the presence of so enigmatical a malady as xanthoma it would be premature to conclude that the removal of existent growths is equivalent to a complete and permanent cure. We

¹The patient who is continuing the treatment at his own home writes Dec. 16th. "I estimate that three-quarters of them are gone. I almost think you would be surprised at the progress that has been made since you saw them."

Dec. 21st, the patient writes, "I am getting along nicely and think it will not be long before the bunches will all be gone."

know little definitely of the intimate nature of the xanthomatous process and still less of the underlying constitutional conditions which may act as factors in the reproduction of the neoplasms.

66 West Fortieth Street.

SYPHILITIC NODES OF THE HYOID BONE.¹

BY

GEORGE T. ELLIOT, M. D.

Dermatologist to Demilt Dispensary, the N. Y. Infant Asylum ; Assistant Dermatologist to the N. Y. Skin and Cancer Hospital, etc., etc.

THERE have lately come under my observation five cases of syphilis presenting at the time of consultation certain symptoms, which were somewhat obscure and difficult of explanation owing to the localization of the lesion producing them. These symptoms, of which the patients bitterly complained, were entirely subjective in character and consisted of marked and severe pain on swallowing, speaking, or when certain movements of the neck and head were made. The pain could not be definitely located, but it was referred generally to the region of the throat. Yet, in these cases, no intra-laryngeal or pharyngeal lesions existed, no indication whatever of disturbance could be discovered ; muscular specific infiltration—that is, a myositis—could be excluded and in fact nothing explanatory of the symptoms of pain could be found until the hyoid region was examined. Then, in each case the presence of one or more periosteal nodes of the hyoid bone were found, existing either alone or associated with a chondritis or an epichondritis of the neighboring portion of the thyroid cartilage. This peculiar and unusual localization for nodes, the obscurity of the source of the symptoms thereby produced, have suggested to me that possibly the features mentioned may be of general practical interest and I have therefore been led to report them, especially since in speaking of these cases to several laryngologists, I found that to them such instances were unknown and that they had never observed them. Yet, these stated to me later and after their attention had been aroused, that they had recognized several similar instances in their own practice.

Of the five cases seen by me, I would report the clinical his-

¹ Read before the N. Y. Dermatological Society, Nov., 1892.

toriels of only two of them, they being sufficient to exemplify the features mentioned.

Case I. Female, age 26, a domestic, was seen in my service at Demilt Dispensary in February, 1891. She gave the history of a tonsillar affection, which had preceded the eruption two months and which suggested the possibility of a chancre of the tonsil, though the fact could not be absolutely determined. When I saw her, the eruption had been present three weeks, was generalized, papular in character and associated with marked adenopathy. It had been ushered in by general malaise, fever, etc. She stated that she had been under a treatment from the beginning and that her physician had told her that the eruption was "German Measles." The cutaneous manifestations disappeared quickly under the administration of Hg Cl_2 , and the patient then became very irregular in her attendance. In December, 1891, she returned presenting an exquisite specific leucoderma on the neck and upper clavicular region, and she also complained of severe pain on swallowing, talking and with every movement of the neck. Throat and larynx were examined, but no lesions of any sort were found. Examination of the hyoid region being, however, undertaken, a node somewhat larger than a pea was detected on the left side of the hyoid bone and also a general tenderness of its entire surface. These symptoms disappeared rapidly under iodide of potash.

Case II. Private practice. Female, age 31, mother of three children, was infected in July, 1890 by her husband, whom I was treating at the time for syphilis. In September a general eruption of undescribed lesions came out over the body, but disappeared at the end of a few weeks. Since then she had been subject to attacks of drowsiness and at the end of October noticing the appearance of new lesions on the thighs, arms and neck, she came to consult me November 6, 1890. Her general health at that time was fair, though she was somewhat anæmic and subject to attacks of dysentery. The menses had ceased since September and she suspected that she was pregnant. General adenopathy existed as well as an eruption of typical papules over the surfaces just mentioned. Marked periosteal nodes were also found along the shins. The patient was put immediately upon proper treatment, and with the exception of a few attacks of ostealgia, of nodes on the tibiae, of headaches, presented no symptoms up to October 19, 1891. In the meantime (April, 1891), she had been confined and had given birth to a perfectly healthy baby, which has, moreover, remained

entirely free from any symptoms of syphilis to this day (November 20, 1892), notwithstanding that it has received no treatment whatever, directly or indirectly, for it has not been nursed by its mother. On October, 1891, the patient suffered from nodes on all the long bones and on the bones of the feet, so that she could hardly walk, and she also complained of pain on swallowing and on talking. The pain was referred to the throat in general, was so severe that the patient was afraid to swallow and she had therefore become quite run down. In the mouth, pharynx and larynx, nothing could be found to explain the pain. The muscular tissues were unaffected, but from the outside there could be distinctly felt on each side on the hyoid bone, a rounded exquisitely sensitive swelling—a node. Besides, there was also an area of sensitiveness over the upper portion of the thyroid cartilage on one side. The symptoms quickly disappeared under treatment, but a recurrence of the nodes in the spring of 1892 occurred. She had had in the meantime nodes on the tibiæ, femora, the humeri and especially on the bones of the feet, but no other manifestation of syphilis. At present, the patient is suffering from a return of the nodes on the bones of feet.

The treatment made use of in this case was primarily inunctions and then HgCl_2 , for the first year continuously and then with intermissions. The iodide of potash was only given when the outbreaks of nodes were severe and then a most interesting effect of the drug was observed. There would not be any eruption, but marked iodic symptoms would develop in a few days, the nasal, pharyngeal and laryngeal mucous membranes being affected. In addition, however, an excessively severe and profuse leucorrhœa would arise and continue until after the K I was stopped, when it would gradually cease. This symptom would be entirely absent so long as none of the drug was taken, but would develop every time it was administered. The patient had no uterine disease, had never had leucorrhœa in her life before, so that the conclusion that it was a symptom of iodism would seem a perfectly proper one.

These two cases, I believe, demonstrate very well the features pointed out by me in the first portion of this paper, and they appear to me to be of some practical interest, owing to the wide extent of territory to which the pain is referred, an extent so great that the patient's history and description would scarcely suggest that the subjective disturbance was due to so small a lesion. It is for this reason only, that I have allowed myself

to call attention to the occurrence of nodes on the hyoid bone and the necessity of seeking for their presence in cases such as I have described. Certainly the lesion itself is a common one in syphilis, but the localization of the nodes in these cases and the marked symptoms produced by them are in my opinion very unusual.

Besides the nodes on the hyoid, there are several other points in Case II, which appear to me to be of interest. In the first place, the symptoms which have developed from the beginning have consisted, with the exception of the slight eruptions mentioned as occurring in September and October, 1890, entirely of nodes on the bones. These have come repeatedly, not only localized, but also generalized and during all of that time there has not been a lesion on the skin or mucous membranes—not even a mucous patch. The limitation of the syphilis to the production only of nodes and of nothing else during a period of two years appears to me to be rather an uncommon occurrence. It is furthermore interesting to note, that though the woman acquired her syphilis in the very beginning of—possibly at the same time with—her pregnancy, yet the child was carried to full term, was healthy when born and has yet shown no evidences of syphilis. This would tend to show the benefit upon the child to be derived from treatment followed regularly and continuously during the whole of pregnancy and is an example of a fact, which has been, however, observed already. I do not, however, believe that that treatment has completely cured the baby, but I regard it as syphilitic still and would not be surprised if sometime later some lesion due to the disease would develop. The last point to be mentioned in connection with this case is the production of a severe and profuse leucorrhœa by iodide of potash. I cannot find this fact mentioned among the effects of the drug, and I would regard it, therefore, as a unique occurrence and one worthy of particular note, for the reason that the knowledge of such a possible cause for leucorrhœa might save many a woman, obliged to take K I, from a useless and perhaps long continued gynæcological treatment.

7 West 31st Street.

A CASE OF SKIN SHEDDING.¹

BY

HENRY WILLIAM BLANC, B.S., M.D.

Professor of Materia Medica, Therapeutics and Dermatology, in the Sewanee Medical College.

SOME months ago I received a letter from Dr. W. T. Bolton, of Biloxi, Miss., asking my opinion of a remarkable case of skin shedding that had come under his observation. On reading the notes that were enclosed I was surprised to find that here was a description of a disease to which I had recently given considerable study, having myself made careful notes upon two cases which are reported in the October, 1891, number of the *International Clinics*, under the title of erythema exfoliativum recurrens.

As the bibliography of this disease, and my reasons for classing it as an erythema, are there given in full, I shall not burden this paper with an unnecessary repetition.

With Dr. Bolton's permission, I here give a report of his case from notes furnished me at different times at my request.

Maggie P., aged twenty years, house-maid by occupation, but also goes to market and helps about laundry. While washing and ironing on May 6th, she perspired a great deal, and, to cool off, went out into the open air when the wind was blowing hard, thus suddenly checking her perspiration. The result was an attack of nausea and vomiting accompanied by pains in the back and limbs. A purgative was given the next day, and the patient put to bed. On May 9th Dr. Bolton was called in at 7 A.M. He noted the following symptoms: Temp. 99.6, pulse 104, nausea and vomiting. The ejected matter is yellowish (bile colored) and viscid. Patient complained of dizziness and a severe headache, the pain being in the upper and back part of the head. Skin of face swollen. Face, neck, and upper part of chest covered with an eruption (erythematous), suggesting the idea that they had been exposed to intense heat. Tongue coated.

On being questioned, patient declared that she had had a similar eruption in February, 1890, and in August, 1891. The first time she had the eruption she thought she had scarlet fever. Both previous attacks had been accompanied by slight fever. None of her relatives have suffered from a similar disease.

¹ Read before the Tri-State Medical Association, at Chattanooga, Tenn., October, 1892.

Both parents, and two brothers, died of consumption. She has had measles, but has never had diphtheria, nor scarlet fever, unless the attack of February, 1890, was this disease.

At 7 P.M., of May 9th, it was noted that the temperature was 99, and pulse 80. Patient had vomited at 6.30. Tongue coated in center, with the edges and tip clean but red. Headache not quite so severe.

May 10, 7 A.M. Temp. 99.8, pulse 98. Slight nausea, but no vomiting since last evening. Did not rest well during night. Took wine several times and broth once. Rash has extended over whole surface of body.

5.30 P.M. Temp. 99.2, pulse 108. General appearance better. Expression of face not so anxious. Skin very red. Wine and broth several times during day.

May 11th, 8 A.M. Temp. 98.8, pulse 90. Rested well and slept greater portion of the night. Took wine and broth several times. Tongue clean, but not red; its coating, together with a thin enveloping membrane, is coming off. Epidermis of upper eyelids beginning to desquamate.

1.30 P.M. Condition about same as at 8 A.M.

May 12, 8 A.M. Temp. 98.8, pulse 88. Had a severe headache during last evening and early part of night. Return of nausea, but no vomiting.

The mucous membrane of roof of mouth exfoliated in a solid mass. On May 12, and the two following days, the epidermis of the entire body was thrown off. That of the trunk and limbs coming off in pieces one to two inches wide, and three to five inches long.

The epidermis of the hands and feet, particularly the former, came off almost without a break, resembling gloves and moccasins.¹ The nails were loose but did not come off at this time.

The malady gave no further trouble, and the patient was soon up and out and spending a week in New Orleans. However, on May 31st, just twenty-five days after the beginning of the last attack, she was again suddenly taken sick with the same symptoms, only in a much milder way, the rash being less intense and extensive. The face, mouth, and upper extremities peeled, as before, and on June 4th, the fifth day of the attack, a piece of epidermis a foot long was removed from the arm and elbow.

During the second attack there was slight sore throat, and

¹These gloves and moccasins the author has in his possession. They closely resemble those illustrated by him in the "International Clinics."

some pain over the upper part of the right lung on coughing. On June 4th, the urine was examined and found free from albumen. Specific gravity, 1008.

The nails of fingers and toes fell off after the first attack, but the time is not stated. They also fell off after the two previous attacks. There was very little therapeutic interference in the course of the disease. Oxalate of cerium was given for the vomiting at the outset, and later on calomel and ipecac, combined in powders, were administered.

One dose of quinine and phenacetine, two grains and a half each, was given in the course of the disease, and several times the skin was anointed with vaseline and quinine.

I would respectfully call attention to what I deem the peculiar characteristics of this case and those already reported by me.

1. *Recurrence.*—In the case here reported there were four attacks in the space of two years and four months, coming on at irregular intervals.

One of my patients was averaging two attacks a year, and at the time his case was reported (1891) had had the exfoliative erythema twenty-three times.

The cause of the recurrence, like the cause of the disease, is unknown, and the accidents precipitating the attacks differ with each case.

Dr. Bolton's statement that his patient had had a check of perspiration suggests that this may have been the immediate or exciting cause of her eruption. If this be so then the skin and nervous (vaso-motor) system must have been peculiarly sensitive and liable to disarrangement by impressions from external temperature.

That a marked general erythema (hyperæmia) may be produced by cold I can attest from a case that came under my observation last summer. One of the students of the University of the South, 18 years of age, complained to me of a sense of malaise and nausea on going out into the weather on damp and chilly days, saying that large surfaces of his skin would turn red and burn. Furthermore, he said that when he bathed in cold water the part of his skin touched by the water would turn red.

As he was otherwise in good health he was greatly annoyed by this physical peculiarity. Anxious that my eyes should confirm his statements he requested me to go with him to the general bathing pool of the students and watch the result. He

then removed his clothes and showed a good muscular development and quite a white skin. After diving into the water which had a temperature of 56° Fah., and after remaining there four minutes he came out to be inspected. His condition was now quite changed, as he had declared it would be. The face was flushed, but the trunk, arms and thighs, had turned a bright red—a smooth, diffused erythema, feeling quite warm under the fingers. He said that it itched him and burned slightly. I then made him come out and put on his clothes, taking his temperature, which had fallen a degree and a half during the bath.

The redness remained for an hour and then passed off.

Here was a case of almost universal erythema, which had been directly produced by a known cause—cold. I have mentioned this case which is unique in my experience, as an illustration of the fact that erythematous disease is not necessarily dependent upon a germ or poison within the system, and that recurrences may be produced by the removal of certain known causes.

2. *Low pulse rate.* I have already called attention (loc. cit.) to the lack of resemblance of the pulse in recurrent exfoliative erythema to that of scarlet fever, a disease which French writers have supposed it to resemble, for the rapid pulse of scarlet fever is characteristic, and in marked contrast with the disease in question. The case here reported had a faster pulse than any that I have noted, and this averaged only 94½ beats per minute.

3. *Absence of marked febrile symptoms.* The disease is not characterized by marked febrile symptoms. The history of the cases goes to show that the first attack is the one most likely to be accompanied by high fever. Subsequent attacks may or may not be accompanied by elevated temperature.

The highest temperature attained by Dr. Bolton's case was 99.8.

4. *Extensive desquamation.* I know of no disease where the desquamation is as great and as complete.

Even *dermatitis exfoliativa* (of which Brocq believes this to be a variety), though accompanied by general scaling of the epidermis, does not shed, in so short a space of time, scales as thick and as large as this disease. It differs from *dermatitis exfoliativa* by being of shorter duration, by not appearing in patches at the beginning, and by not having evening exacerbations.

5. *Resemblance to Scarlatina.* For a short time in the history of a case the resemblance to scarlatina is so marked that it seems to me desirable that this article should be concluded by contrasting the main points of difference in parallel columns.

SCARLATINA.	ERYTHEMA EXFOLIATIVA RECURRENT.
1. Occurs once.	1. Recurs frequently.
2. Contagious.	2. Non-contagious.
3. Marked pyrexia.	3. Pyrexia very slight.
4. Fauces much swollen.	4. Fauces red.
5. Pulse very rapid.	5. Pulse not rapid.
6. Eruption lasts five days.	6. Eruption lasts three days.
7. Desquamation sometimes considerable.	7. Desquamation always excessive.
8. Albuminuria common.	8. No albuminuria.

SARCOMA CUTIS.¹

BY

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MULTIPLE pigmented sarcoma of the skin is sufficiently infrequent to make the study of new cases of more than ordinary interest; and the grave prognosis, the inefficacy of treatment, the entire absence of any satisfactory theory concerning causation, are sufficient motives to lead to further investigation of the malady.

Having had a marked example of this most interesting disease under observation during the past two years, I have thought it worth while to report it, together with some account of the histology of the lesions excised at various stages of the malady.

A. H., æt 62, German, in fair general health, although somewhat anæmic in appearance, first came under observation two years ago, having upon the right leg eight or ten round and irregularly oval, dark red lesions, varying in size from a dime to a half-palm, the larger lesions evidently being formed by the coalescence of two or three smaller ones. They were elevated from a line, to three or four lines above the healthy skin, and a few of the larger ones were superficially ulcerated and somewhat

¹ Read at the Sixteenth Annual Meeting of the American Dermatological Association, September 13, 1892.

fungoid in appearance. They were scattered irregularly over the limb from the ankle to the knee, the greater number being upon its anterior surface, and, with the exception of slight tenderness, gave rise to no subjective symptoms.

Upon inquiry it was learned that the disease had begun two years previously, at a point below and anterior to the internal malleolus, with the appearance of a lesion similar to those now present upon the leg. Upon the advice of an eminent surgeon, since deceased, this primary growth was excised together with the inguinal glands upon the same side. From this latter circumstance it is to be inferred that glandular involvement occurred unusually early in the course of the disease. At the time of his first visit a considerable portion of one of the lesions over the tibia was excised for the purpose of examining it microscopically, and from this examination a probable diagnosis of sarcoma was made. After a few visits the patient, dissatisfied with the progress of the malady, again sought the aid of the surgeon, insisting upon the amputation of the diseased limb. This was accordingly done by Prof. Ashhurst of the University of Pennsylvania, six months after his first visit, about the lower third of the thigh. The patient made an uninterrupted recovery, and was then lost sight of for eighteen months, but again came under observation about one month ago with a recurrence of the disease in the stump, (Fig. 1.) The lesions now present, which first began to appear eight months after the amputation had been done, are distinctly different in appearance from those noticed two years ago. Numerous dark-blue nodules, varying in size from a hemp-seed to a hazel nut, are scattered about irregularly, firmly imbedded in the skin, in some instances projecting one or two lines above the surface, in others on a level with the surrounding sound parts. Here and there are to be seen quite small nodules of a bright-red color, this color being due to the extreme vascularity of the lesions, as pressure causes it to disappear completely. The nodules are for the most part discrete, firm and elastic to the touch, and free from all subjective sensation except a slight burning, which, however, is not constant, but occurs occasionally at night after the patient has retired. Most of the lesions are covered with a thin epidermic scab, most noticeable at their margins, where it forms a kind of collar about them. Upon the inner surface of the thigh, a short distance from the end of the stump, is a dollar-sized patch of pea-sized nodules thickly crowded together. This patch is distinctly depressed in the center, as if the lesions composing it were in pro-

cess of atrophy, and here the scaling is more noticeable than elsewhere, being abundant enough to, in some measure, conceal the blue color of the neoplasm. In other parts of the disease there is likewise evidence of retrogression, some of the lesions showing slight central atrophy, but nowhere is there yet any ulceration. Here and there are dime-sized, smooth, round cicatrices, the sites of former nodules which the patient himself had



FIG. 1.

destroyed by canterization with strong nitric acid. The patient is somewhat stouter than when first seen two years ago, and his general health seems excellent. With the aid of cocaine anaesthesia a small nodule situated upon the end of the stump was excised for microscopical examination, and the sections made from it compared with those made from the earlier lesions.

The most interesting features of the case are to be found in its histology. In the sections made from the earlier lesions two years ago pathological changes were found in all parts of the skin. The epidermis was very thin where present—over the

center of the neoplasm it had vanished entirely. The inter-papillary prolongations of the rete mucosum had, for the most part, disappeared, but, here and there, rather slender branching tracts of epithelial cells extended a considerable distance downward into the corium.

In these remnants of the rete the columnar cells had entirely disappeared, their place being occupied by the round cells of the new growth. The papillary layer of the corium showed an abundance of round cells chiefly aggregated along the margins of the papillæ where these joined the rete. These cells were deeply pigmented and arranged in a crescentic fashion, giving

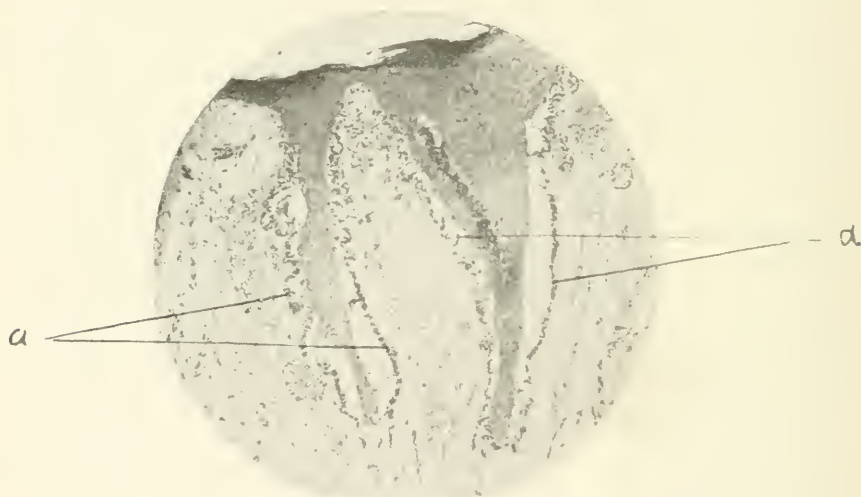


FIG. 2.

Border of Sarcomatous Cells (a) surrounding enlarged papillæ—low power.

the borders of the papillæ a curious festooned appearance (Fig. 2). The center of the papillæ showed much less alteration than the margins, although here and there were to be seen surrounded and oval nests of cells.

In the corium proper, separated by considerable intervals, were present round and oval collections of cells containing large nuclei surrounded by a rather scanty protoplasm and polygonal in shape, owing evidently to the pressure which they exerted upon one another. In places these cell nests were much closer together and arranged linearly, which gave to the sections,

when viewed with the unaided eye, a striated appearance not unlike sections of kidney (Fig. 3).

Besides these rounded cell-nests there were to be seen, scattered about irregularly, numerous isolated large round cells, with unusually large nuclei. It was these large isolated cells, together with the festooned borders of the papillæ, which gave the sections their extraordinary appearance.

Blood vessels were abundant, particularly in the upper part

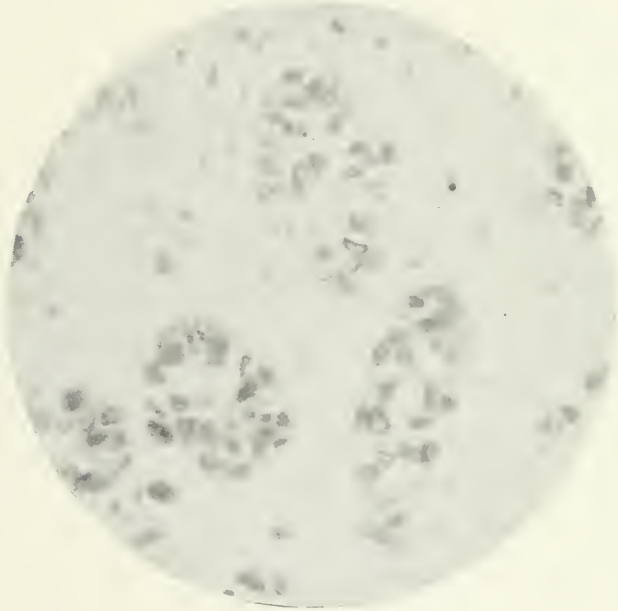


FIG. 3.

Nests of Sarcomatous Cells from same section as Fig. 1.—high power.

of the corium, and were without distinct walls, being sinuses rather than true vessels.

Sections of the nodule recently excised from the stump presented the ordinary features of round-celled sarcoma. The center of the nodule consisted of an aggregation of moderately large round cells, while here and there were scattered smaller islets of similar cells growing between the fibres of the corium. Pigment was present in abundance, both free and in the cells. The epidermis showed little or no pathological change. There was an entire absence of the large round isolated cells described above

as well as of the peculiar arrangement which gave the sections made from the earlier growths the striking appearance already referred to. Indeed, viewed as a whole, the histological features of the two lesions bore but a faint resemblance to one another.

In connection with this case it will be of interest to briefly report another, which has quite recently come under the writer's notice. The patient was a married woman, of Irish birth, 48 years of age. Upon the outer edge of the right nostril was seated a slate-blue, pea-sized tumor of firm consistence, attached by a short thick pedicle. According to the patient's statement, it had made its appearance as a small nodule two years prior to the time of coming under observation, growing slowly and painlessly.

The tumor was excised, and the wound thoroughly cauterized, within a week the small eschar was cast off, leaving a healthy surface which healed rapidly. The microscopical examination showed the tumor to be composed of round cells with an abundance of flakes of brown pigment scattered throughout the growth. With the exception that it was much less deeply pigmented, the tumor was the counterpart, histologically, of the nodule excised from the stump of the thigh of the first case.

A point of interest in this case is the long duration of a single lesion without any tendency to multiplication, pigmented sarcoma of the skin being usually multiple. Although undoubtedly sarcomatous, the growth thus far in its history has shown little malignancy. Its situation too, was somewhat unusual, the extremities being the parts most commonly the seat of these tumors.

Sarcoma of the skin received but little attention from dermatologists prior to 1870, when Kaposi published the clinical histories of five cases of what he designated *idiopathic multiple pigmented sarcoma*. More recently other cases of a similar kind have been published by de Amicis, Köbner, Bulkley, Hardaway and others. The most complete account, however, of cutaneous sarcoma we owe to Perrin, who, in a thesis published in 1886, collected all the cases, fifty-five in number, which had been published up to that time.

The cases reported by Kaposi, de Amicis, Köbner, and Hardaway present a well defined type of cutaneous disease, having a pretty uniform clinical course. The malady in the majority of cases begins upon the extremities, and spreads with more or less rapidity toward the trunk, and finally involves

every region of the integument. It usually terminates by metastases to internal organs, the final stage being accompanied by elevation of temperature, diarrhœa, and other evidences of septic infection; de Amicis and Tanturri have reported cases in which the primary lesion was situated elsewhere than upon the extremities, but the subsequent course of the malady was much the same as in the type described by Kaposi.

The duration of the disease is usually two or three years, but it varies within pretty wide limits, de Amicis having reported a case of eighteen years' duration, and Hardaway one of ten. The duration depends, to some extent, upon the age of the patient, the disease being much more rapidly fatal in children than in adults.

Of the fifty-five cases collected by Perrin but three were females; from which it would appear that sex exercises a marked influence over the occurrence of the disease.

The histological features vary considerably; in some instances the neoplasm was of the round-celled variety, in others the cells were fusiform, and not uncommonly both varieties were found in the same lesion. The origin of the pigment is probably hæmatic, at least in part, the abundant blood-supply and the character of the blood channels favoring hæmorrhage and consequent deposit of pigment in the tissues. It would seem, however, that a distinction must be made between pigmented and true melanotic sarcoma, since it is probable that the pigment in the latter is a product of the cells of the neoplasm, which frequently has its origin in tissues normally pigmented, as the choroid and pigmented nævi.

The prognosis is unfavorable in the extreme, a fatal termination occurring at the end of a few years at most. True melano-sarcomata are especially malignant, running a rapidly fatal course; surgical interference often seemingly only hastening their progress toward a fatal issue.

The ætiology of the malady is involved in the utmost obscurity, little or nothing definite being known about its causation. In this connection, however, a case of Schweigger's, referred to by Klebs,¹ is of interest as pointing to a possible infectious agent in the pigment substance. The case was one of melano-sarcoma of the conjunctiva bulbi in which a small pigmented nodule developed on the eyelid, apparently an infection by contact.

¹ Die Allgemeine Pathologie, Zweiter Theil.

The treatment is to the last degree unsatisfactory. The removal of the tumors either by the knife or caustic is speedily followed by recurrence, or the appearance of new lesions. As has already been pointed out, surgical intervention in melanotic sarcoma seems occasionally to give the malady increased malignancy, accelerating its progress remarkably.

As to internal remedies, Köbner and Shattuck have each reported a case in which arsenic administered hypodermatically seemed to cause involution of the tumors, but other cases in which this drug has been tried have not been favorably influenced by it. In the first case reported in this paper, arsenic was given in doses pushed to the point of tolerance, for months at a time, without influencing in any perceptible manner the progress of the disease.

Correspondence.

DERMATOLOGY AND SYPHILOGRAPHY IN FRANCE.

Treatment of Scrofulo-Tuberculosis of the Skin and Adjacent Mucous Membranes.—There has just appeared in France a work of considerable merit, and one worthy the attention of dermatologists of all countries. I refer to the treatise on scrofulo-tuberculosis of the skin and adjacent mucous membranes, by Professor H. Leloir. It does not devolve upon me to make a complete analysis of the work, but I must call the attention of the JOURNAL readers to it as a book of the first order, and one of the most important which the French school has produced. I will content myself with pointing out, at the present time, how the author thinks lupus should be treated.

Prophylactic Treatment of Lupus Vulgaris.—Here are what from a prophylactic point of view are the advices which Professor Leloir gives:

1. Avoid as much as possible all contact of the skin with tuberculosis virus, whatever be its origin.
2. Treat antiseptically as rapidly as possible all wounds capable of having been soiled by the tubercular virus.
3. Destroy or render antiseptic as rapidly and as completely as possible all tubercular foci capable of inoculating the skin secondarily.
4. Render antiseptic, as much as possible, all regions of the skin soiled by liquids (sputa, fecal matters, pus, uterine discharges, etc.,) containing tubercular virus.
5. Oversee, with the greatest care, the integument of subjects affected with visceral tuberculosis, and combat this tuberculosis by relieving the economy by an appropriate therapy.

6. Modify, and build up the general health of lymphatic subjects, descendants of tuberculous ancestry, by a course of treatment, and hygiene of the strictest kind.

7. Do not forget that, as Dr. Landouzy says, in dealing with the tuberculous, the hour of sentimental preoccupations is past. Do not keep silent in regard to contagiousness; a contagiousness which we must call threatening and not absolute; but the more threatening the younger the individual exposed to contagion. Treat a lupus as soon as it is discerned; if this is not done the disease-germ is permitted to disseminate itself at a distance upon the integument.

Internal and General Treatment of Lupus Vulgaris.—Professor Leloir lays down the principle that there is not internal treatment which acts in a specific manner upon the lupus elements. One should, however, institute a reconstructive mode of treatment, to endeavor to modify ground upon which the bacillus passes through its evolution. For this purpose, like all French authors, he prescribes cod liver oil in large doses. At times he finds certain advantage in combining it with other substances. Here are some of the formulæ which he advises: Cod liver oil and antiscorbutic syrup, equal parts; (of this from four to ten soup-spoonfuls are given a day). Cod liver oil and syrup of bitter orange, ââ 200 grams; rum, 50 grams; (from four to twelve soup-spoonfuls per day). He also often prescribes arsenic as a tonic, and almost always combines it with iodide and chloride of sodium; medicines recommended, as is well known, for a long time in tuberculous affections. Here are two of his formulæ.

1. Iodide of sodium. grams. 5.
 Chloride of sodium. " 25.
 Pearson's solution. gtt. 100.
 Glycerine.
 Syr. aurant. cort. am. ââ gram. 150.
 (or of cinchona or gentian).
2. Syr. antiscorbutic.
 Glycerine. ââ gram. 100.
 Iod. sodii. " 4.
 Chl. sodii. " 10.
 Sol. Fowleri. gtt. 60.

S. 2 to 10 teapoonfuls daily, after meals.

For profound subjects of anæmia he associates with this iron and arsenic. In some cases he has had good results from carrying out for ten days or so sub-cutaneous injections of iodoform oil, according to the method of Dr. Morel-Lavallée. When he resorts to this procedure he employs it in series of ten days each, leaving an interval of ten or fifteen days between. As other efficacious internal remedies he mentions creosote, which he gives when the subjects of lupus are threatened with pulmonary complications; and also sulphur waters, which in certain cases exercise a happy influence upon the general health, and perhaps, too, upon the local condition in the serofulo-tuberculous.

Local Treatment of Lupus Vulgaris.—The method which Professor Leloir prefers to all others for the local treatment of lupus vulgaris, deserves to be mentioned with all its details. He gives to it the name of mixed treat-

ment. I would mention in this connection, that since 1886 I have repeated in all my writings that there is no treatment for lupus—but that the treatment of this affection should vary according to the case, and be influenced by the phases of the disease; from this a line of procedure arose to which I, six years ago, gave the name of mixed method. However that may be, here is how the savant dermatologist of Lille proceeds.

1. He begins by cleaning the diseased surface. For this purpose he causes the crusts to fall by means of poultices, pulverizations, and antiseptic lotions. If it be a lupus non exedens, he applies a strong salicylic paste. Here are two of the formulæ indicated:

(a.) White wax.

Resin dammar (white). ââ 30 parts.

Melt the mass, add when half-cooled, salicylic acid. 20 parts.

Creosote of beechwood. 40 parts.

(c.) Diachylon plaster.

White oil. ââ 20 parts.

Powdered salicylic acid. 3 parts.

Resorcin.

Beechwood creosote. ãã 2 parts.

Dissolve the salicylic acid and resorcin in the oil; add the mixture to the plaster melted and nearly cold, finally incorporate the creosote, and pour out at once through a cere-cloth strainer.

2. When the diseased surfaces are well cleansed, they are anæsthetised with sub-cutaneous injections of cocaine, or, better still, the subject is put under chloroform. All the lupus tissue possible is then removed, with a strong curette. The hemorrhage is stopped with tampons of antiseptic absorbent cotton. It is well to cauterize with the thermo-cautery the most fungus-like portions, and those most inclined to bleed. Finally, a last and careful going-over with a smaller curette is resorted to, in the endeavor to remove all the lupus tissue possible, and to reach that in the anfractuosités of the derma. Dressing is made with absorbent cotton, impregnated with iodoform-ether. When we have to deal with a sclerous lupus it is difficult to practice scraping. This operation becomes, on the contrary, relatively easy when we cauterize at first, with the thermo-cantery, the whole periphery of the lupus patch, to an extent of four or five millimeters. It is easy after this to remove with the curette all morbid tissue, not only in the regions cauterized, but all over the central part which has not been touched.

When the lupus infiltrates deeply the nose, the neighborhood of a natural orifice of the face, the skin of the back of the hand, the toes and fingers, we must act with the greatest prudence in proceeding to the operation mentioned, and must avoid destroying too much, so as not to occasion irreparable loss of tissue, such as might be followed by deformity of such severe nature as atresia of an orifice.

One should then operate only little by little, taking two or three seances for it, and watching carefully the nature of the cicatrization. It is well, in particular in treating lupus of the nostrils, to place tampons in the orifice to prevent contraction.

3. The consecutive care varies according to the case, the variety of the lupus, its location, and the depth of the infiltration. When the author thinks he has succeeded in removing mechanically all that can be removed,

he is satisfied to dress it twice daily with compresses of unprepared cheese-cloth, wet with the following solution:

Bichloride of mercury.	gram 1.
Alcohol.	
Glycerine.	ââ " 250.
Distilled water.	" 500.

Or with a pommade of bichloride of mercury, in dose varying with the degree of irritation produced upon the skin. Nevertheless, the preparations of the bichloride have the inconvenience that they after provoke stomatitis, and cause on the face intense œdema of the lids. He also reserves the complete bichloride dressing for lupus of the extremities. Upon the face he first uses a spray of bichloride solution for a quarter of an hour, or if this is badly borne, a strong solution of boracic acid. The diseased area is carefully cleansed with cotton wet in these solutions. The macrated epidermis is removed, and the parts carefully disinfected surrounding the borders of the patch. The whole extent of surface is touched with a brush wet in iodoformized ether. These details must be gone over each time that a dressing is made.

The topical application which he then applies over the patch varies with the case, as we have already said.

He most frequently, after having performed his operation, seeks to obtain a cauterization of an energetic nature of the denuded surfaces, so as to destroy all vestiges of lupus tissue which might still remain in the anfractuosités of the derma. For this purpose he employs either ointment of iodhydrargyrate of potash, or of lactic acid; but it is necessary to proceed with the most extreme prudence in using these substances. If we have recourse to the iodhydrargyrate of potash ointment, the points to be cauterized are covered over with little masses of cotton spread with the ointment, and the dressing is changed twice daily during a period of time which varies, according to the case, from two to five days. If we have recourse to lactic acid, which the author prefers, the little masses of cotton are soaked with a mixture of four parts of lactic acid and six parts of glycerine. These are left in position for from two to seven hours a day, according to the case, during one to three days. In the interval of these applications the wound is dressed with absorbent cotton soaked with camphorated naphthol, or with a mixture of one part of resorcin and two parts of camphor. In some cases Dr. Leloir replaces the iodhydrargyrate of potash or lactic acid, with cauterization by means of deliquescent chloride of zinc, or by applications of ten to twenty per cent. salicylic acid ointment. When this period of cauterization of the wound is completed, the author puts on a dressing (observing all the precautions mentioned above; spraying, cleansing of the borders, touching with iodoformized ether, etc.), of cotton tampons wet in camphorated naphthol, or better still, camphorated resorcin. This is repeated twice a day, for from two to four days, according to the case, or until the wound is well cleansed, and the suppuration, so to speak, suppressed. From this time forth he employs the stick of nitrate of silver to destroy the points of lupus tissue which may have escaped, and which often present themselves under the aspect of soft fleshy plugs or buds, usually pale, and at times quite large. He has also at times recourse for this purpose to the chloride of zinc, or the thermocautery. When he ceases the use of camphorated naphthol or camphorated

resorcin, he may or may not powder the wound with iodoform, and then cover it over with a layer of vigo plaster, with mercury, or with Unna's mercurial plaster, phenicated or not, as the case may be. If the vigo plaster irritates too much, he replaces it with Vidal's red plaster, calomel pommade, or a twenty-five or fifty per cent. ichthyol salve, according to the case. If these means do not seem to succeed, he dresses with pure iodoform, or a mixture of iodoform and salol, or again with powdered aristol, or aristol ointment. When the wound is pale and flabby he dresses with the sub-carbonate of iron, pure, or mixed with charcoal or salol. It is well understood that when we have to deal with superficial lupus, in which it is easy to remove and destroy mechanically all the lupus tissue, he employs neither lactic acid nor the iodhydrargyrate ointment. When there are only isolated tubercles enshrined in the sclerous tissue, the author contents himself to destroy them with the thermo-cautery; after the operation he dresses them either with cataplasms of potato flour prepared with a solution of bichloride of mercury, or with a mild bichloride ointment, or simply with powdered iodoform covered over with one of the plasters which we have just mentioned. When the eschars are detached he employs, as we have previously indicated, a dressing with camphorated naphthol, or camphorated resorcin. Where cicatrization has been obtained, if it prove vicious the author improves it by scarification, applications of vigo plaster, massage, or electrolysis. He advises covering over the cicatrix for a long time after the apparent cure, with vigo plaster during the night, and during the day time with a bichloride of mercury ointment, in strength of one or two to the thousand.

Lepra in Brittany.—DR. LAMBACO whose excellent works on the question of leprosy are well known, has just made a communication to the Paris Academy of Medicine which was entirely unlooked for. For a long time he has been struck with the analogies which have seemed to him to exist between the symptoms of the new diseases which have been described under the names of Morvan's disease, syringomyelia and those of lepra as observed in Oriental lands. He decided, therefore, to carry out an investigation on the spot from which he arrived at the conviction that the disease described by Morvan in Brittany under the name of *analgesic paralysis of the upper extremities with panaris* is nothing else than leprosy more or less modified or attenuated. Among patients affected with this disease, among the invalids who are known in this country by the name of Kakous, he found deformities, retractions of the fingers, various trophic disturbances such as loss of phalanges, muscular atrophies, anæsthesias, ulcerations, onychias, etc.—all symptoms, which he regards as characteristic of lepra. Minute investigations have permitted him to affirm that this disease has existed in Brittany from the most remote antiquity. At the present time it is observed only in extremely attenuated forms and stops, so to speak, in its first stages, which permits of our understanding why physicians who have not had much experience with the affection have been able to believe that it was a new disease.

New Treatment of Alopecia Areata.—The attempt has been made for some time in France to perfect the local treatment of pelade. I have already spoken in my correspondence of several of these attempts; here is still another.

1. DR. MOREL-LAVALLÉE first makes an antiseptic washing of the denuded regions, then practices a very mild scarification which is at the same time superficial. He then applies a layer of ointment (what particular kind he does not say) which should remain in place for from two to twenty-four hours. He repeats this operation every eight days at least, and every five days at most. He resorts to no epilation. He has only employed this procedure in alopecia occurring in rounded and circumscribed patches; that is to say in pelades which are most readily cured. He has seen the hairs begin to grow eight days after the third scarification, and occasionally even eight days after the second.

2. DR. BUSQUET treats pelade by daily applications by means of a little brush made of cotton wet with essence of Chinese cinnamon, the brush being burnt after each application. He has the hair cut as short as possible and forbids soapy or other lotions so as to avoid all humidity of the scalp. The mean duration of treatment by this method is from three to five weeks.

3. DR. P. RAYMOND has just proposed to the Dermatological Society of Paris a new local treatment of pelade; a treatment whose inspiration is derived from that of Drs. Lailier and Besnier. Here is how it may be formulated: (a). have the surrounding region shaved for a space of from one to two centimeters and maintain the hair short; (b). Soap the head twice a week with an antiseptic soap; for example, the phenicated soap. (c). Make every morning a friction over the whole scalp with the following solution, bichloride of mercury fifty centigrams, tincture of cantharides twenty-five grams, balsam of Fioraranti fifty grams, cologne water 150 grams. Besides this the diseased areas of scalp are to be brushed for a minute or two with a stiff brush wet with this same solution; (d). the same evening the affected areas are to be rubbed in the same manner with the following: Salicylic acid two grams. Beta naphthol ten grams, acetic acid (crystallizable) fifteen grams, castor oil 100 grams. When contagion for the patient's surroundings is to be feared, the plaques should be covered during the daytime with Dr. Vidal's red plaster. The treatment thus employed should only occasion redness, but no inflammation nor excoriation. In all cases in which he has employed this procedure the hairs have begun to grow in less than a month; the absolute cure taking place about the fifteenth day of treatment.

4. I have often said and I now repeat it—that from a therapeutic point of view—we must divide the pelades into two groups. (a). Those, which ordinarily circumscribed, get well easily by whatever process one employs, vesicatories, acetic acid, iodized collodian, irritating plasters, etc. (b). Those which are ordinarily extensive, with numerous foci, or the variety called decalvans, resist all medication or recur incessantly no matter what treatment they receive. In the latter case I have remarked that the alopecia coincides at times with seborrhœa of the scalp, and it has seemed to me a useful procedure to carry out treatment for the seborrhœa, with sulphur preparations at the same time that the means are being directed against the alopecia.

PARIS, September 30, 1892.

L. BROcq.

Society Transactions.

NEW YORK DERMATOLOGICAL SOCIETY.

218TH REGULAR MEETING.

DR. C. W. ALLEN *in the Chair*.

Case of Initial Lesion of Syphilis on the Scalp.—Presented by DR. VAUGHAN (by invitation).

The patient, 35 years of age, married, about the middle of July, during a fight, got a scratch on the bald forward portion of the scalp from the finger nails of a man, who is believed to have had syphilis, having shown sores on the body and practical alopecia, but could not be examined. The scratch never entirely healed, but became much worse about the middle of August. On September 1st, he presented a sore, the size of a quarter of a dollar, with considerable thickening and an area of redness extending into the surrounding skin. There was then slight enlargement of occipital and post vesical glands. The middle of September, although there were then no secondary lesions, the sore appeared typical enough to be presented at the clinic at the Post Graduate School, as chancre of the scalp. Since then well marked secondary symptoms have developed. Dr. V. believes that the man was inoculated with syphilis from the virus on the nail of the other man.

DR. SHERWELL stated, that he had never before seen a chancre on the scalp, though many in regions equally unusual. He would not be able at present to recognize the lesion as a chancre, but with the history and the ability of the gentleman presenting the case, could not doubt the diagnosis.

DR. TAYLOR said that he had observed chancres on almost every part of the scalp and face.

DR. BRONSON had never before seen the initial lesion upon the scalp. He had recently been consulted by a female hospital nurse, who had syphilis of recent date and in whom no trace of a primary lesion could be found except upon the front of the thigh, near the middle, where remains of a sore with some induration together with characteristic enlargement of the inguinal glands of the same side apparently marked the site of inoculation. The nurse had attended syphilis patients and it was surmised that a soiled finger nail might have been the vehicle of contagion and an accidental abrasion the point of entrance.

DR. LUSTGARTEN agreed with the diagnosis. He had never before seen a case of chancre on the scalp and called attention to the fact that Ricord once had claimed immunity for the scalp.

DR. CUTLER who had seen the case some days ago, when it was much more typical than at present, thought it was a case of syphilitic infection of the wound, which had remained open for some time and not the result of infection at the time of the injury.

DR. TAYLOR saw a chancre the size of a silver half dollar near the border of the hair on the forehead of a young man who had had several mos-

quito bites on that locality. He fondled with a syphilitic woman and in some way infected himself by scratching the bites with his infected finger.

DR. ALLEN observed a chancre at the border of the hair behind the ear; infection had probably taken place through the habit of the patient to scratch this portion with his finger. In the present condition of the lesion on the scalp of the patient presented, he would not feel justified in making the diagnosis of chancre, though he had no doubt this diagnosis had been correct.

Multiple Benign Epithelioma of the Skin.—See page 459, Dec. 1892, Number of this Journal.

DR. FORDYCE presented a patient with this rare affection and showed a number of sections and drawings illustrating the histological character of the tumors.

Case for Diagnosis.—Presented by DR. ROBINSON.

The patient, an Italian woman, 31 years of age, six years ago noticed a small tumor on the left arm; four months ago a second similar tumor appeared on the face, and within the last two and one-half months numerous other tumors have appeared on the face, arms, etc.

DR. SHERWELL considered the disease as certainly *lepra tuberosa*, but one extraordinarily similar to sarcoma in occurring first on the arm, and in other respects.

DR. FOX never before thought that sarcoma and *lepra* could look so much alike, but had no doubt that this was a case of *lepra*; the enlargement of the ulnar nerve, certain alterations in the expression in the face, particularly the swelling over the supra-orbital ridge were peculiar. He called attention to the frequent occurrence of difficulty in breathing in leprous persons owing to the swelling of the mucous membrane of the nose.

DR. BROXSON said that the enlargement of the ulnar nerve would not exclude sarcoma, which may also involve the nerves.

DR. LUSTGARTEN considered the case as a typical tubercular *lepra*.

DR. MORROW had been impressed at first sight with the leprous aspect of the disease, and by closer inspection had been confirmed in this opinion. The long duration of a single lesion before the appearance of general symptoms was not so unusual in *lepra*. He was surprised that Dr. Robinson did not detect any anæsthetic patches on the body, as they certainly existed. Last year he saw a case, in which there was present only a single leprous tumor just below the ear and anæsthesia of the left fore-finger. His diagnosis of leprosy in this case had been confirmed by the subsequent development of general symptoms. Several years ago he had called attention to the clinical similitude of *lepra* and sarcoma and exhibited photographs illustrating the same.

DR. ROBINSON had examined sections of a tubercle since date of meeting and found numerous *lepra bacilli*.

Case of Prurigo Mitis.—DR. CUTLER presented a girl 10 years of age, born in Austria, in whom the disease has existed for about six years.

Case of Typical Prurigo.—DR. BRONSON presented a man, 18 years of age, likewise a native of Austria, with characteristic lesions of this disease.

Case of Typical Prurigo.—DR. CUTLER presented another patient with this disease, a man of Austrian birth, 29 years of age.

DR. SHERWELL asked Dr. Cutler whether the inguinal glands were enlarged in the girl; he cannot remember to ever have seen presented in the Vienna clinic a girl affected with prurigo, though he had seen many male patients of the kind then. The two male patients he considered as typical cases of prurigo of Hebra.

DR. LUSTGARTEN considered the two male cases typical ones. In the case of the girl he is not so positively sure of the diagnosis. Most likely the case would also be called prurigo in Vienna, but he believes that here the disease is curable and perhaps ought rather to be classed as a peculiar form of chronic urticaria. The absence of the swelling of the lymphatic glands, the smaller size and more pointed shape of the lesions was characteristic.

DR. CUTLER thought, that although the glands were not swollen, on account of the early development and of the long duration, the case of the girl ought to be accepted as one of mild prurigo.

DR. BRONSON called attention to the rule laid down by German authorities, that in prurigo the intensity of the disease always increases downward, being most severe on the outer aspects of the legs. It had seemed to him, that while this is true of severe congenital cases, there were other cases not necessarily congenital, in which this rule did not obtain. In the latter the disease occurred in periodic attacks and might disappear entirely.

DR. FOX would set up the prurigo mitis rather as the type of the disease and considered the usual cases of prurigo ferox as an aggravated type. The mild type has existed in this country for years, while the severe cases had been extremely rare, so that the existence of prurigo ferox in America had almost been denied.

DR. LUSTGARTEN stated, that he rested his doubts in the case of the girl on the possibility of a cure, while Hebra had always considered the incurability as a characteristic feature of prurigo. Cases like that of the girl might remain doubtful for a long time but finally be cured by antipyrine or bromides.

DR. FOX thought, that the effect of a cure ought not to overthrow the diagnosis of prurigo.

DR. LUSTGARTEN: Then the definition of Hebra ought to be changed. The intensity of a case is not necessarily parallel to the curability, some cases may always remain mild ones, and never change into aggravated forms, but they will not be cured.

DR. ALLEN mentioned, that he had been taught in Vienna by a disciple of Hebra, that undoubted cases of prurigo were cured after coming to America probably owing to the change of climate, etc. He would think the element of incurability not a necessary one in diagnosis, believing some cases curable.

Case of Periodical Erythema of the Palms and Soles followed by Shedding of the Epidermis.—Presented by DR. KLOTZ.

The patient, a stone cutter, 41 years of age, German, has generally enjoyed good health. For the last five years, in spring, he had an eruption on both palms and soles preceded by nausea and pain in the stomach and followed by blistering of the epidermis, which would then come off in large shreds, not in scales, and leave an entirely new surface. Last week the same eruption began to make its appearance again; five days ago the radial border of the volar aspect of the thumb and index showed a diffuse redness

with a number of more intensely red round spots between, on which, two days later, the corneous layer of the epidermis began to separate as in blisters, no fluid, however, was found underneath. To-day the epidermis is beginning to be detached in shreds, starting from cracks over the joints of the fingers. The palmar surface of the hands of the patient owing to heavy work is naturally very rough and thick, so that the conditions of the disease do not appear very distinctly. The soles are likewise affected.

DR. TAYLOR was inclined to consider the process rather due to mechanical irritation.

DR. KLOTZ stated that the patient had worked at his trade for years without having any trouble with his hands until within the last years and then only in spring; this was the first time the eruption appeared at another season. Besides external irritation from work would not account for the appearance of the blistering on the feet nor for the general symptoms preceding the outbreak. He had presented the case because it closely resembled observations reported by Polotebnow, of St. Petersburg (Unna's Monatshefte 1887, Suppl.). In France epidemics of similar cases, occurring in 1828, and later had been described by several authors under the name of *Aerodynia*.

Extensive Lupus of the Face and Scalp.—DR. ROBINSON presented a patient, whom he had shown before the Society at the 215th meeting, to demonstrate the effects of the treatment proposed to be employed at that time.

DR. FORDYCE noticed remarkable improvement in the appearance of the case.

DR. SHERWELL remembered the case very well; it had improved marvelously. He doubted whether the improvement was due to the *specific* change of diet or whether it was not due to the *radical* change.

DR. BRONSON was disposed to doubt the effect of the diet upon the lupus proper. An improvement in the appearance was conceded, but this he believed due rather to modification of the inflammatory symptoms than to any curative effect upon the lupus itself. The same effect he thought might be expected from a similar change in diet upon markedly inflammatory manifestations attending syphilitic lesions.

DR. FOX expressed the opinion that such a diet would cure many cases of psoriasis and other inflammatory affections. Certainly great improvement was apparent, but due more to the disappearance of the congestion than to alterations of the lupus itself.

DR. LUSTGARTEN said, that in lupus there was a long way between improvement and a cure, and that he therefore would wait before expressing an opinion on the value of the treatment.

DR. MORROW had no doubt that certain elements of food are likely to improve or to injure the conditions for the development of the bacilli.

DR. ROBINSON stated that he considered that the treatment of tuberculosis by the direct action of so called antiparasitic drugs gave very unsatisfactory results and that especially in chronic tuberculosis it is better to endeavor to try to change the molecular constitution of the tissue protoplasm so as if possible to sterilize the ground and thus kill the organisms, for unless the ground is favorable the latter must sooner or later die. Probably

every human being, during life, is frequently the temporary habitual of tubercle bacilli, but the ground being unfavorable the majority escape tuberculosis. He believes that the protoplasm of the human being partakes of the peculiar molecular constitution—the vital characters of the protoplasm of the substances upon which it feeds and consequently in cases of tuberculosis the subject should be restricted to the partaking of the flesh and milk of those animals not liable to the disease. He therefore ordered this patient goat's milk, fish including codliver oil and oysters. He was also allowed starchy foods from any source. As cattle are liable to tuberculosis he thinks beef and cow's milk are probably very injurious substances, making the ground favorable for the organism. In support of this he cited a statement made by Dr. Brush that tuberculosis is unknown where cows do not exist; of course, he recognized the origin of the disease from other sources than cows. He thought codliver oil an excellent thing simply because it was the oil from an animal not liable to tuberculosis.

As regards the case presented he thought the improvement was simply wonderful and believed that within a few months the lesions will have disappeared and that in a case lasting thirty-two years and of unusual severity as regards extent of area affected and rapidity of extension during the last few months previous to this treatment. He had also observed excellent results in other cases of chronic tuberculosis, including cutaneous, pulmonary and lingual tuberculosis and believed it should be followed in tuberculosis of the bones. He doubted its value in acute tuberculosis but thought this plan of dieting would ward off tuberculosis in persons predisposed to the disease.

DR. MORROW said, that the favorable effect of a change of diet had been observed by him in cases of other neoplasms. He cited the case of a patient with cancerous tumors of the breast, who for two or three years had lived on nothing but champagne and goat's milk on account of the impossibility of her stomach to bear any other food; within that time all the tumors had disappeared almost entirely.

THE NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY, THURSDAY EVENING, OCTOBER 13, 1892.

EDWARD L. KEYES, M. D., *President, in the Chair.*

Report of a Case of Vesical Calculus of Unusually Large Size to be Adherent to the Bladder Wall.—Presented by DR. SAMUEL ALEXANDER.

He reported this case, and presented the specimen removed. The patient was a man who was admitted into Bellevue Hospital suffering from hematuria and great pain, especially at the end of passing water. He had none of the ordinary symptoms of stone. The blood was intermingled with the urine, and was larger in quantity towards the end of micturition. The searcher went through the urethra very easily and entered the bladder where a calculus was detected which was immovable by pushing against it. Rectal examination showed a tumor occupying the region just above the prostate, very hard, and more marked on the right than on the left side; when pressed upon it caused great pain. The man's symptoms had lasted about

six years, and he was in an almost uræmic condition. A supra-pubic cystotomy was performed, and a large sized calculus found, the top of which was almost against the symphysis, and the lower part rested against the upper portion of the prostate, the neck of the bladder being very much dilated. On one side the stone was adherent to the wall of the bladder, and entirely occluded the orifice of the right ureter. When the stone was dislodged there was a squirt of fluid from the right ureter, like the squirt of an artery, and this continued, in alternate jets, for several minutes. The ureter was very much dilated, so that the finger could be passed into the orifice. The left ureteral orifice was also slightly occluded by the stone. The stone was removed with considerable difficulty, as it had to be torn off from the bladder wall, although it did not bring any of the mucous membrane with it; it left a granular surface, which bled easily. It was dislodged by putting one finger into the rectum, and pressing upwards against the perineum. After the operation the patient did badly, and although he lived for four days, he died of uræmic poisoning. At the autopsy a cystic kidney was found on the right side. The kidney substance was entirely destroyed by a hydronephrosis. On the left side there was also a slight hydronephrosis. The stone removed shows very accurately the shape of the bladder.

DR. E. L. KEYES inquired to what Dr. Alexander ascribed the jetting character of the fluid that flowed from the right ureter, the kidney on that side being hydronephrotic. In a healthy kidney, the jetting of the urine is said to be due to the ordinary rhythmical contraction of the kidney pelvis. Another point referred to by Dr. Keyes was that it is usual, in cases of adherent stone, to find the surface of the stone roughened by little mammillary projections or granulations, which cause it to adhere to the bladder wall. The surface of the stone shown by Dr. Alexander was very smooth, and the question is whether it was adherent or simply firmly pressed against the wall of the bladder.

DR. ALEXANDER said that the jetting character of the discharge from the right ureter was possibly due to the respiratory action of the diaphragm; certainly not to the normal, regular action of the kidney. Its previous occlusion also had something to do with it. In reply to the second point raised by Dr. Keyes, Dr. Alexander said there was no doubt about the stone being adherent; it had to be torn away from the bladder wall, and left a mucous membrane which looked as if it was sanded and which bled much more easily than that portion of the bladder wall which had simply pressed against the stone.

DR. L. BOLTON BANGS said he could confirm to some extent the experience of Dr. Alexander. In one case he had removed, by the supra-pubic route, a stone which weighed nearly three hundred grains. It had formed a cavity for itself in the prostate and lower part of the bladder, and in order to remove it he was obliged to put two fingers into the rectum and one into the supra-pubic opening, and strip away the bladder wall from it. The stone removed was perfectly ovoid, and had none of the mammillary out-growths referred to by Dr. Keyes. The mucous membrane to which it had been adherent was granular in appearance, like in Dr. Alexander's case.

DR. R. W. TAYLOR said that the smooth surface of the stone presented by Dr. Alexander was probably due to the fact that it had been adherent to the smooth surface of the trigonum.

A Peculiar Case of Prostatic Concretions, with Specimens.—Dr. E. L. KEYES presented a large number of prostatic concretions, like millet-seeds, which he had removed from a man 45 years of age. The man suffered from constant dribbling of the urine, and the urethra was always in a purulent condition. At night he suffered less than by day. He was made to pass his urine in two parts, and both parts were found to be purulent. A catheter was then introduced into the bladder, and through this perfectly clear urine flowed; the residual urine was also clear. This located the pus in the prostate. Dr. Keyes said he did not search the man for stone, as he had no symptoms of it. A central perineal incision was made and the finger introduced, and an abscess cavity in the prostate discovered. To the finger it felt like a rotten raspberry, and this seedy material was scraped out with the finger nail. The opening of the abscess was enlarged, and the entire cavity thoroughly scraped. The perineal opening was allowed to close after three weeks. There is now no more residual urine, and no dribbling from the urethra and the man will no doubt get entirely well. He may have some trouble, however, owing to the fact that the anterior portion of his prostate was destroyed, although the mucous membrane was left.

Report of a Case of Urinary Extravasation Following Litholopaxy.—This case was also reported by Dr. Keyes. The patient was a man 60 years of age, with moderate prostatic obstructive trouble. Some time ago he had been subjected to litholopaxy, and about half an ounce of stone removed. After awhile his symptoms returned, and a homœopathic surgeon removed another piece of stone by litholopaxy, but no relief followed. When he came under Dr. Keyes' care, another stone was discovered in the bladder by means of the searcher. The man's wife begged Dr. Keyes not to give him chloroform, as the homœopathic surgeon had informed her that he took the anæsthetic very badly. Ether was accordingly administered. The man struggled violently, became rigid and it took a large quantity of the drug to bring him under its influence. A hypodermic injection of morphine was also given, and he became quieter. The stone was removed with the lithotrite, and after the operation the man felt quite comfortable, having no pain excepting in the groin. He failed to pass any water, however, and a catheter was introduced into the bladder, which was found to be perfectly dry. The man had no chill; no temperature. The morning following the operation no water had been passed; by means of a catheter about half an ounce was withdrawn. His bladder was washed out thoroughly, but no blood clot found. He was then given twenty grains of calomel, and soon afterwards he had a free movement of the bowels and slowly began to pass water. Ten days afterwards he had another attack of suppression of urine, without chill or temperature. About this time the abdomen began to swell, and a deep thickening could be felt on one side. An operation was then decided upon. Chloroform was administered, which he took very easily, and an exploratory incision, about six inches long, made over the posterior part of the swelling, when a cavity was discovered containing about a quart of urine. It surrounded the kidney and contained masses of putrid lymph. The effusion was sub-peritoneal, lifting up the peritoneum. The cavity was thoroughly washed out and good drainage established. The man is now practically out of danger. Dr. Keyes said that in his opinion the effusion came from a cyst, either of the kidney or upper part of the ureter, which ruptured during his

violent struggles while taking the ether, and that the other kidney stopped acting immediately by sympathy. Under the relaxing influence of the calomel, the other kidney again began to act.

DR. WILLY MEYER suggested that perhaps there was a stone in the ureter, and that the enlarged pelvis of the kidney had ruptured.

DR. BROWN said that in the line of the suggestion made by Dr. Meyer, the man might have had a hydronephrotic kidney, and that there was a laceration or rupture of the pelvis.

DR. FULLER said that he had assisted at the operation. The kidney felt like a collapsed hydronephrotic kidney, or a collapsed cyst of the kidney.

Discussion of the Question—"Blood in the Urine—How to Discover Its Source—What to Do for It."—This discussion was opened by DR. L. BOLTON BANGS.

Dr. Bangs said that he assumed that the term "blood in the urine" refers to the presence in the urine of normal or intact blood discs, and that no reference is to be made to that pathological condition known as hæmoglobinuria, or hæmatinuria. It must also be premised that blood in the urine is but one symptom, and may occur in many different pathological conditions. It is true that it is often the first symptom for which treatment is sought, and although it may be the most dangerous, it is not necessarily the most diagnostic one. In quantity it may vary from a few drops to a very great volume—enough to jeopardize the life of the subject, and it may be persistent, continuously present, or intermittent. Neither its color nor its quantity will enable us to decide definitely whence it comes. Writers have declared that when the blood is bright red in color, it indicated hæmorrhage from the bladder, and when it was blackish or deeply intermingled with the urine, it indicated renal hæmorrhage, but Dr. Bangs said that in his observation the color alone does not indicate its source.

Blood may find its way into the urine from any one of the anatomical divisions of the genito-urinary tract, or from one or more of these divisions at the same time. Blood in the urine from a source in the urethra may be overlooked. The physiological action of the urethra may cause blood to escape from a diseased area sufficient in quantity to be commingled with the urine as the latter passes, and there be no appearance of it at any other time. Endoscopic examination is of value in making a definite diagnosis in these cases.

The answer to the question as to whether the source of the hæmorrhage is in the bladder or kidneys is often a very troublesome one. We may say in general that hæmorrhage from the bladder is much more abundant, more likely to clot, more persistent, and, when intermittent, with shorter intervals than that from the kidney. It is usually associated with some symptom of irritability of the bladder, and also with some evidence of a lesion, ascertained by exploring instruments or bi-manual palpation. We are now able to bring to our aid another sense: with the cystoscope we are able to see the lesion and make a differential diagnosis, and also to determine whether the blood comes from the bladder, or one or both kidneys. But cases will occur in which we can get no help from the instrument. Hæmorrhage from the kidney is rarely so rapid and abundant as to obscure the fluid medium in the bladder, and make a cystoscope examination impracticable:

hence, if this does take place, it may be regarded as a diagnostic point in favor of a bladder lesion. It is possible, however, for the kidneys to supply an enormous quantity of blood. We should carefully examine each of the organs from which the blood may come. The microscopic examination of the urine gives valuable aid in suspected kidney lesions, by informing us of the presence of casts, crystalline and granular material, tissue of neoplasms and epithelium.

The second part of the question, namely, "What shall we do for blood in the urine?" is so directly connected with the treatment of its cause that we are immediately led to ascertain upon what pathological condition in the genito-urinary tract its presence depends. The question involves often the treatment of symptoms, as well as the removal of its cause.

DR. R. W. TAYLOR said he considered Dr. Bangs' paper an excellent one, showing large experience and keen clinical observation. The study of hæmorrhages above the ureteral orifices depends largely upon a consideration of the symptoms, and of the microscopic and cystoscopic examinations. Dr. Bangs has fully discussed these questions. Perhaps a little more might be said about hæmorrhage from the urethra. For instance, the hæmorrhage from the urethra which follows micturition in a case of a declining acute urethritis about the bulb may be quite severe. This may also be the case when there is compression of the urethra.

DR. WILLY MEYER referred to the value of the cystoscope in making a differential diagnosis in cases of hæmaturia. This instrument has shown that most of the old-fashioned rules which governed us in making our diagnosis were erroneous; only this one rule is still considered to be correct, that if at the end of a discharge of urine blood exudes, it comes from the bladder or the prostate. It is important to make out whether the hæmaturia is accompanied by symptoms or not; whether it is a so-called "symptomless" hæmaturia. If such a hæmaturia comes on before the age of 40 or 45, then the blood probably comes from the kidney, if abundant, or from a new growth in the bladder which is not situated near the urethral orifice. If there are symptoms, that is to say, pain, frequent micturition, etc., and we can exclude stone, then we see whether there is or is not residual urine. In a young person, if stone can be excluded, and if then there is pain and frequency of urination, there is probably an ulceration of some kind on the bladder wall. After exhausting all other methods, if we then use the irrigating cystoscope (not the ordinary cystoscope) with anæsthesia, we can in most instances expect to locate the source of the hæmorrhage. Furthermore, we must select the proper time for the examination. An inflamed and swollen *colliculus seminalis*, due to persistent masturbation in the young, may also be a source of hæmaturia. These patients first pass blood, then clear urine, and then again blood. These cases are very difficult to treat successfully.

DR. KEYES referred to the fact that in prostatic bleeding behind the cut-off muscle a little blood will flow out after the act of urination is completed; the next time the patient passes water, he will pass a clot at the beginning of the act; then the urine will become clearer until the end, when he will again pass blood. He also referred to the resorption test advocated by Dr. Otis. If there is an excoriation of the bladder wall, and a solution of potassium iodide is injected into the bladder, the drug is

quickly absorbed, and at the end of a very short time its presence can be demonstrated in the saliva by means of the starch-iodine reaction. Dr. Keyes also mentioned the fact that turpentine has proved very successful in his hands in the treatment of certain cases of renal hæmorrhage.

DR. MORRIS MANGES said that impacted feces have been known to cause hæmaturia. Whether it is due to the pressure of the over-distended colon on the blood vessels or not, he did not know.

DR. JAMES P. TUTTLE said that in a number of cases coming under his observation he has found powdered cinnamon very valuable in the treatment of hæmorrhage of the genito-urinary regions. The use of this drug for this purpose was first suggested to him by a physician in Brooklyn, and he has never seen it mentioned in any text-book on therapeutics. It acts rapidly and he has never found it to fail. One case of hæmorrhage from the kidney in which it was very efficacious afterwards proved to be due to carcinoma.

DR. KEYES referred to the curative influence of an exploratory nephrotomy in renal hæmorrhage.

The discussion was then closed by Dr. Bangs. He mentioned the fact that a number of cases have come under his observation where tobacco seemed to have been the exciting cause in producing hæmaturia.

Book Reviews.

International Atlas of Rare Skin Diseases. Edited by Malcom Morris, London: P. G. Unna, Hamburg; H. Leloir, Lille & L. A. Duhring, Philadelphia. Part VI. Leopold Voss: Hamburg and Leipzig.

The sixth fasciculus of the International Atlas contains three full page, admirably executed chromo-lithographic plates embracing 10 figures. Plate No. XVII of the series, by Mitchell Bruce, represents the face and fauces of a patient affected with "*An Anomalous Discoloration of the Skin.*" The peculiar discoloration resembling that produced by silver or by cyanosis, affected the integument of the entire body, being especially marked upon the hands and feet; the conjunctival, oral and nasal mucous membranes were also involved. The patient complained of pains of a burning, shooting character, chiefly in the lumbar and epigastric regions. His general health was good. No cause could be discovered for the anomalous discoloration.

Plate No. XVIII, by L. Jacquet, gives an admirable illustration of "*Trophic ulcers of Syringo-myelia (Myélite Cavitaire).*" The trophic changes in the skin induced by syringo-myelia are of especial interest to the dermatologist from their oftentimes marked resemblance to those of leprosy. The direct dependence of the trophic troubles upon medullary lesions was in this instance fortunately demonstrated by the autopsy which revealed cavities in the cord.

The cutaneous lesions were entirely confined to the right side of the body. The ulcerations were situated 1st *upon the hairy scalp* behind and above the ears, presenting a vast, irregular purulent surface tinged with blood and surrounded by a white cicatricial border. 2d. *On the neck* ex-

tending from the middle of the corotid region to external part of clavicle, there was an irregular ulcer with jagged margins—surface neither elevated nor depressed, partly covered by a thin shiny coating of coagulated blood, with pigmented periphery. There were a few smaller ulcers on right side of nape of neck. 3d. *Below the clavicle* parallel to the bone there was an irregularly quadrilateral ulcer with dry shiny surface, except at superior external angle which was ulcerated and weeping. 4th. *On the dorsal surface of right wrist* was an irregular sore the size of a 2-franc piece which appeared quite recently. Numerous cicatrices were seen in the neighborhood of the ulcerations. There was marked diminution in sensibility with complete analgesia of considerable area of the integument on the affected side.

Plate XIX, Figs. 1 and 2 by S. Giovanni, represent "*Canities Ungium.*" Figs. 3 and 5 of the same plate by P. G. Unna illustrate the same disease under the title of "*Leukonychia*" with corresponding changes in the hair, "*Leukotrichia.*"

In Giovanni's case all the nails of both hands presented in their entire extent a white opaque almost ivory color—the hair was unaffected. Histological examination showed the decoloration to be due to the abnormal quantity of air contained in the interior of the nails. The changes in the structure of the nails and the abnormal process of keratinization which permits of this accumulation of air bubbles escapes microscopical research. The author considers it a distinct variety of leucopathia ungium.

In Unna's case the nails of both hands presented an opaque quill appearance, which was divisible into two zones, the posterior zone of a bluish white color like milk, the anterior one of a yellowish white like chalk. On some of the nails brownish red, transparent, transverse bands alternated with the chalky-white bands, giving them a striated appearance.

As in the former case, examination showed the white, chalky aspect to be due to greater porosity and the development of air spaces within the interior of the nail.

The white bands of singed hair in the same patient were found also to depend upon the development of cavities filled with air.

Unna objects to the term employed by Giovanni, canities ungium, as implying a senile involution rather than a permanent condition. He cites the two terms *leukonychia* and *leucotrichia* as more correctly descriptive of the clinical aspect, without reference to the pathology of the disease.

The Ready-Reference Handbook of Diseases of the Skin. By GEORGE THOMAS JACKSON, M.D. With fifty illustrations. Philadelphia: Lea Bros. & Co., 553 pages, 12mo.

The author, not a novice in dermatological literature, in making an addition to the already formidable array of hand-books on diseases of the skin, intends, as stated in the preface, to present the art (and science?) of Dermatology as it now exists (a rather uncertain entity, which at the present time needs almost a camera to fix its features). No attempt has been made, he professes, to discuss debatable questions, hence pathology and etiology do not receive as full consideration as symptomatology, diagnosis and treatment.

Part I, General Considerations, pp. 25-52, opens with the *Anatomy and Physiology* of the skin, giving the most important features of the histological structure of the skin and its adnexa; physiology is represented only by some

remarks on the functions of the sebaceous and sweat glands. Then follows, under *Diagnosis*, a description of the lesions of the skin, primary and secondary ; their location, distribution, configuration and characteristics of color ; the history and subjective symptoms (burning, pain, etc.), deservedly being given second place. To the microscope importance is conceded only for the determination of the presence or absence of fungi. The few remarks on the methods of examination deserve commendation. We believe, however, if the author considered a general part necessary at all, that a brief summary of the general pathology and pathological anatomy and histology of the skin would not have been out of place. A consideration of the occurrence of the conditions of anæmia, hyperæmia, inflammation with exudation and infiltration, atrophy, etc., as well as of the influence of microbes, particularly on suppuration, would greatly facilitate the understanding of the lesions, and would at the same time afford a more rational and safe basis for therapeutics.

Therapeutic Notes, following next, contain remarks on a number of new remedies, partly active drugs, partly excipients. Among the latter mollin might have found a place. Here, too, some general remarks on the effects of the principal representative drugs on the different pathological conditions, and some rules on the mode of application of the various forms of external medications, are missed (difference of ointments for protection and for resorption, effects of baths, plasters, etc.). This chapter is supplemented by an Appendix of 13 pages at the end of the book, which gives a number of formulæ intended as guides for the formation of prescriptions for the treatment of skin diseases. They are, as a rule, very well chosen. We should not advise, however, to copy the formula for Asiatic pills, page 532, too closely. Just imagine the depressing effect on the patient of the sight of 800 pills !

The author's well-known Dermatological Don'ts very aptly conclude the general part.

By far the greatest portion of the book, pp. 53-527, is devoted to Part II—the consideration of the separate diseases of the skin, which, for the convenience of ready reference, are alphabetically arranged. This method, which has been adopted before by Brocq, the most recent exponent of French dermatology, renders classification entirely unnecessary. The list of diseases is almost complete, including a number of titles, which owe their existence to recent publications, founded sometimes on the observations of one or a few cases by a single author. Some omission seems to have occurred with the affections of the sweat glands : Periaadenitis refers to abscess of sweat glands, which is nowhere to be found ; so is inflammation of sweat glands, to which abscessus tuberiformis refers. A paragraph on Feigned Eruptions would be a welcome addition. A novel and valuable feature of the book is the introduction of a large number of synonyms and of denominations from foreign languages, particularly German and French. Besides, we find enumerated a number of names of symptoms, or conditions not directly essential to dermatology, but often named in connection with it, as syringomyelia, acantholysis, causalgia, dartrous diathesis, Morvan's disease, etc. The indication of pronunciation of the various names, which is given according to Foster's Illustrated Encyclopædic Medical Dictionary, will undoubtedly prove a welcome innovation, for the abundant dermatological

nomenclature, mostly derived from the Greek, with their accumulation of consonants, often presents no small difficulties. From these manifold advantages the book does almost service as a dermatological dictionary.

The same completeness we meet in the consideration of the single diseases, their symptoms, diagnosis and treatment, the author amply fulfilling his promise. The less common diseases are treated with sufficient accuracy, while in those which furnish by far the largest number of cases in practice, no important features will be found to have been overlooked. Considerable space is devoted to differential diagnosis. In treatment due consideration is given to hygiene and diet, as well as to internal medication, while careful selection has been made from the large treasure of external remedies. A good deal of attention is given to the description of the mode of application of the remedies, which is quite often of more importance than the drug itself. The book, however, is not entirely free from repetitions, as well as from inaccuracies and contradictions, which might have been avoided by a careful revision of the manuscript. Some of them, particularly from the chapter on Syphilis, cannot be left unchallenged. On page 448, induration of the base is said to be characteristic of all forms of initial lesion, but it is not so rarely missed on the female genitals. On page 451, general enlargement of the lymphatic glands, especially the epitrochlear and post-cervical glands, is stated to usually show just before the outbreak of the secondary eruption, which, we believe, usually occurs at a later stage of the disease. On the same page the statement, the first eruption of the secondary stage is an erythematous one, certainly requires some restriction. Catarrhal or gastric symptoms (page 452) and marked pyrexia are by no means of rare occurrence at the time of the secondary eruptions, therefore not of great diagnostic value against exanthematous fevers and medicinal eruptions. From chromophytosis the erythematous syphilide is said to differ by *not* being scaly and by the absence of the microsporon from the *scales* when they are examined under the microscope. Page 458, the so-called tertiary syphilides are said to occur any time after the first year, while in reality they are often found within the first year. We cannot admit that (page 463) the gumma always begins in the subcutaneous tissue and involves the skin secondarily; the nose, lips and penis particularly affording proof of the contrary.

In the definition of *Granulationsgeschwülste* as connective tissue new growths, some word like embryonic must have been omitted. Under treatment of Acne by internal remedies we find the passage of the cold sound through the urethra sandwiched between doses of chrysarobin and corrosive sublimate. Acne fontalis does not seem to be the most opportune name for what is more often called acne varioliformis. Furunculosis in small children during hot weather, particularly of the scalp, and the lichen urticatus or urticaria papulosa in children might receive a little more attention on account of their practical importance.

Shortcomings like those enumerated, as they have occurred to us during the perusal of the book, however, are not of great importance, and do not detract from its value in general; they have been mentioned rather to be avoided in a future edition. The illustrations are mostly very good and appropriate, the colored plate, representing the author's very rare case of xanthoma, hardly enhances the practical value of the book.

No intimation has been given by the author for whom he has intended to write, whether for the student, the general practitioner or the dermatologist. As a ready-reference hand-book, we may presume that it is principally devoted to the wants of the practitioner who is able to make a diagnosis which he can easily confirm or reform by comparison with the book ; at the same time he will not look in vain for advice as to treatment. To the student, the ante as well as the post-graduate one, this book will be an invaluable companion during clinical demonstration of cases, during which the remarks of the teacher must necessarily be rather short and incomplete. In looking over the pertinent chapters after coming home, with the appearance of the patients still fresh in his memory, he will impress on his mind all the important features of the disease with great facility. For the study of diseases of the skin, without the advantage of clinical demonstrations, however, the book will offer even less advantages than other hand-books, in which a classification, however imperfect, will be more opportune. But even to those more advanced in dermatology the practical character of the book, particularly the nomenclature and pronunciation, may often be a time-saving, handy source of information. H. G. K.

Selections.

Changes in Urine due to Hypodermic Injections of a Normal Salt Solution.

GIRODE. (*Archives Générales de Médecine*, October, 1892.)

Apropos of the use of interstitial injections of saline solution in the algid stage of cholera asiatica, a word is said by Girode in regard to the consequent urinary changes. As would be expected, the diuresis is marked, during the first few days especially. Urea, sulphates, phosphates are increased in the daily average, but not for the litre, while the chlorides are increased in both ways. The water of the injection is eliminated much more rapidly than the salt. About the eleventh day, following the hypodermoclysis, a certain degree of hæmoglobinuria appears, indicating a destruction of red corpuscles. The changes due to the injection cease on the sixteenth to the eighteenth day.

JOHNSTON.

The Detection of Sugar by Phenylhydrazine. SCHWARZ. (*Annales des Malades des Organes Génito-Urinaires*, October, 1892.)

The difficulties in the detection of sugar in the urine in the presence of albumin, uric acid excess, etc., by Fehling's test, are obviated according to the author's claim, in the use of phenylhydrazine. To ten parts of urine he adds one to two of acetate of lead. After filtering, five parts of the filtrate are mixed with five of a normal salt solution and one or two drops of phenylhydrazine added. The mixture is shaken and if it contains sugar, a citron or orange yellow color appears. After saturation with acetic acid, a finely divided yellow precipitate indicates the presence of sugar. The test may be verified by Fehling's, if greater certainty is desired. JOHNSTON.

Hæmoglobinuria Following the Administration of Quinine. CORRE.
(*Bulletin Général de Thérapeutique*, October, 1892.)

Hæmoglobinuria consequent upon the exhibition of quinine is often the manifestation of a predisposition, occasionally running through families, following the administration of the drug more or less rapidly and showing a variable degree of intensity with the quantity of the dose and the susceptibility of the individual. Any of the salts of quinia, given by mouth or hypodermatically, may bring on the attack. The prognosis is good in every case, becoming grave only when the kidneys are unable to eliminate the hæmoglobin and jaundice results. The destruction of red corpuscles, indicated by the presence of hæmoglobin in the urine, exists, as the author states with positiveness from his investigations, as an initial condition in the loss of alkalinity in the blood. Therefore, it is his practice, to administer a large dose of sodium bicarbonate before quinine, in the predisposed. As a remedy for the hæmatogenous jaundice, he recommends the use of the essence of terebenthine, a practice in vogue in South America. JOHNSTON.

Cantharides in the Treatment of Albuminuria.

In a discussion at the Paris Academy of Medicine, on the treatment of albuminuria, reported in the French journals, the question of the employment of the tincture of cantharides was raised by M. Lancereaux, who declared that he had obtained good results from its administration in this disease and in uræmia. This assertion provoked the protestations of M. M. Germain-Sée and Dujardin-Beaumetz. According to Sée, the experimental lesions, produced in animals by the injection of cantharidin, contra-indicate the therapeutic use of that substance in renal affections. This reason is perhaps not sufficient to condemn absolutely the use of cantharides; although it is known that the best way to produce a glomerulitis is to inject under the skin of an animal a few milligrammes of cantharidin. It does not, moreover, prove that the same substance, administered in suitable doses, cannot act in a useful manner on the kidney; for it is possible, that, as Lancereaux affirms, this stimulation produces in some cases of nephritis a beneficial effect. He is so deeply impressed with the efficacy of the tincture in Bright's disease, that he states no one dies of uræmia during his hospital service, an assertion borne out by the testimony of his internes. The treatment advocated by Sée and Beaumetz is chiefly dietetic, composed largely of milk, fruit and vegetables, with such symptomatic medication as occasion may demand. The iodides of strontium and calcium especially, with cardiac stimulants, form their main reliance. The question is, they claim, whether the effect which can be obtained by more certainty and at less risk by other means, compensates for the dangers to which the use of cantharides exposes the patient. In any case, in an old nephritis with hypertrophy of the heart, it does not appear that there is anything to hope from this drug which can only aggravate the renal lesions. JOHNSTON.

Cantharidate of Potassium. CH. TALAMON. (*La Médecine Moderne*, October, 1892.)

In a paper published in this connection the author records the results of his experiments with cantharidate of potassium, a substance recommended by Liebreich in the treatment of pulmonary tuberculosis. In doses of one-tenth of a milligramme, it produced a decided diuretic action,

and he thinks it may prove useful in nephritis with alterations less profound and more recent than in his cases. The cantharidate is formed by the action of caustic potash on cantharidin.

JOHNSTON.

Albuminuria in Syphilis. (*Journal des Maladies Cutanées et Syphilitiques* October, 1892.)

In a reunion of the Russian Society of Syphilography, Dr. Peterson of St. Petersburg, making known part of his researches on visceral syphilis, mentioned that in 88 autopsies on syphilitics he had found lesions of the kidney 34 times. In 36 cases, where the fatal issue was due to syphilis alone, seven patients had succumbed to a chronic nephritis. The author was drawn to examine the urine of syphilitics; the following gives the result of his observations. In the recent cases and in the secondary period, albuminuria exists in the proportion of 3 to 8 per cent., in the cases where the manifestations are tardy.

JOHNSTON.

Alcaptonuria. EMBDEX. (*Annales des Maladies des Organes Génito-Urinaires.* November, 1892.)

The patient—the second case reported of this curious affection, in which the urine becomes black on standing exposed to air,—a woman of 60 years, healthy except for a cerebral affection of three years, and an articular rheumatism of three months' standing, asserts that she has passed black urine since birth. The urine presented the same characteristics as in Bauman and Wolkow's case, previously described. It becomes black in the superficial layers when exposed to air, and the coloration appears when alkalies are added to the water or when it is shaken with atmospheric air or pure oxygen. It possesses considerable reducing power.

By Bauman and Wolkow's procedure, the homogentésinic acid described by them can be separated. This substance dissolves easily in alcohol, water and ether, and the solution presents all the characters of alcaptonuric urine. The fæces contained no reducing substances.

JOHNSTON.

Ammoniacal Urine in the Ætiology of Cystitis. MULLER. (*Annales des Mal. des Org. Gén.-Urinaires.* October, 1892.)

The author wished to test the theory of Rovsing concerning the ætiology of cystitis, and arrived at the conclusion that ammoniacal fermentation of urine plays no role in its origin.

According to Rovsing, cystitis is brought on by means of bacteria, occasioning ammoniacal decomposition of urine. The author shows that ammonia is found in appreciable quantity in the urine of healthy persons, and that if two portions of normal urine are preserved under the same conditions, one of which is mixed with the urine of cystitis and the other, unmixed, less ammonia will be found in the former than in the latter. The ammonia is not volatilized, but is probably decomposed by the aid of bacteria. Muller concludes from his researches that the pathogenic bacteria, producing cystitis, do not cause ammoniacal fermentation of urine, and that the modifications of the vesical mucous membranes depend on causes which we do not understand as yet, but which are not the presence of ammonia in the urine.

JOHNSTON.

Allylsulphocarbamide or Thiosinamine.—DR. HANS VON HEBRA (Vienna Internat. Dermat. Congress 1892).

The writer has investigated the action of the above-named drug and pre-

sented a preliminary report upon its use especially in lupus. The drug which is employed hypodermatically is obtained from the volatile oil of mustard and is prepared by taking two parts of the oil, one part of absolute alcohol and seven parts of liquor ammonia of a specific gravity 960. These are heated together in a water bath at 40°C. for three hours. The characteristic odor of both the ammonia and oil disappear, and upon cooling crystals of thiosinamine separate.

On injecting a solution of this drug in alcohol or ether a smarting is occasioned for the space of a minute or less. A local reaction takes place, but there is no constitutional disturbance produced by it. The effects of this new remedy were tested in five cases of lupus. In lupus tumidus the prominence of the lesions becomes much less marked, there is decrease in the protuberances and the whole area sinks considerably. In ulcerative lupus the thickening of the margins diminishes and healing takes place in a few weeks. Lupus nobules offer the most resistance. The author is unable as yet to state whether lupus may be completely and permanently cured by this method, but he does not hesitate to claim a very favorable influence upon lupus tissue.

Beside the effects on lupus there was found to be a decided improvement in chronically enlarged lymphatic glands especially in tubercular and strumous cases. In syphilis on the contrary the injections so far seem to have no influence and the suggestion is made that possibly we have here a means of differential diagnosis.

The remedy appears to have a marked influence in promoting absorption such as is carried on by the lymphatic system according to prevailing views.

Certain Peculiarities in the Urine of Malarial Subjects. BACCELLI AND PENSUTI. (*Fifth Congress of the Italian Society of Medicine; La Semaine Médicale*, November 12, 1892.)

The conclusions to which their researches on the toxicity of urine among patients affected with malaria, and on the causes of that toxicity have drawn the authors, are briefly as follows:—

First, the toxicity of the urine varies greatly with the individual, the gravity and duration of the malady.

Second, it increases from the onset of the affection up to the period of convalescence.

Third, in general, it is greater during the apyrexia than during the exacerbation of the fever.

Fourth, from time to time, this toxicity may increase rapidly and considerably without appreciable cause and in the absence of any aggravation of the disease.

Fifth, the urinary toxicity is in proportion to the elimination of potassium by the urine; but this proportion is not fixed, a fact which leads to the deduction that the toxicity is due, in part at least, to other chemical products, phosphorus, for example.

Sixth, the toxicity is also in proportion to the coloration of the urine. It diminishes by half when the urine has been decolorized.

Bacelli announced that he had succeeded in producing by inoculations on a healthy man, a typical quartan and a double, tertian malarial fever. The period of incubation was twelve days for the former and six days for the latter.

JOHNSTON.

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No. 2

Original Communications.

ON THE TREATMENT OF BUBO, AN EXCISION, AND THE ATTEMPT TO SECURE UNION BY FIRST INTENTION OF THE WOUND AFTERWARD.¹

BY

FRANCIS SEDGEWICK WATSON, M. D.

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I DO not know how common the practice may be amongst the members of this Society, to attempt to secure union by first intention of wounds, after the excision of bubo, but I have not found in the literature of the subject many references to this method of treatment, and, therefore, have thought it worth while to offer the results of my experience in a number of cases treated in this way.

I have treated twenty cases of bubo, after the method which the title of this paper describes. In two of them there were buboes in both groins, so that the number of buboes operated on was, in all, twenty-two. In ten, a little less than one-half of them, perfect union by first intention resulted.

The cases which are reported in this communication were not selected ones, but every bubo that presented itself in my service at the Boston City Hospital was subjected to the same operative treatment, except that the technique of the operations, as will be seen, was variously modified in different instances. This group of cases includes buboes of a syphilitic, chancreoidal, gonorrhœal, tubercular, and traumatic nature. In all but four

¹ Read before the Suffolk District Surgical Society, Boston, December 7, 1892.

of the cases the skin covering the bubo, was inflamed, and in some of them the inflammation had gone so far as to cause more or less necrosis of the skin. In every case there was extensive suppuration of the glandular structure constituting the bubo. In but one case (a gonorrhœal bubo) was this suppuration represented by a single abscess cavity.

The conditions, therefore, were exceedingly unfavorable to union of the wounds by first intention.

In all the operations the following rules were carefully observed:

1. To remove thoroughly all diseased tissue and to leave, as far as possible, a perfectly healthy surface in every part of the wound. (To secure this it is always necessary to carry the dissection down to the fascia covering the abdominal muscles; sometimes to expose the femoral vessels, and generally the external inguinal ring).

2. To excise such portions of the skin as threatened to become necrotic or had already become so.

3. To curette the under surface of the skin flaps.

4. To thoroughly swab the whole wound with dry sterilized gauze sponges or sponges wet with a solution of corros. sub. 1-4000.

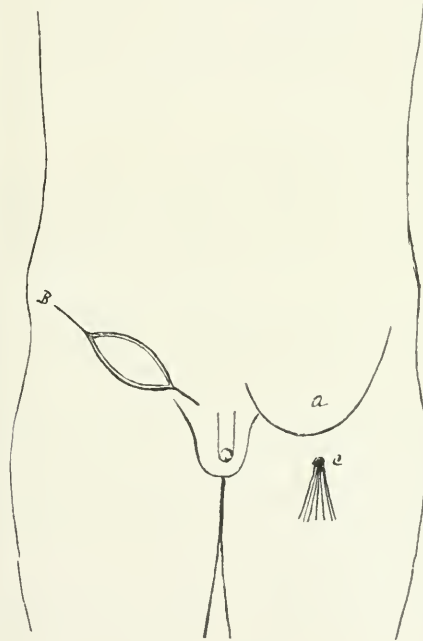
In performing these operations one or two precautions should be especially observed. These are, to guard against wounding the femoral vessels and the spermatic cord, and to proceed with especial caution when dissecting about the inguinal ring, lest an unsuspected hernia be wounded. In one case the writer quite unexpectedly came upon a small inguinal hernia upon removing a mass of firmly adherent glands that lay upon the outer aspect of the ring, and narrowly escaped wounding the gut.

Another matter of importance and one to which I have seen no reference made, is that of tying as far as possible, the ends of all the lymph vessels that have been divided. In many cases these vessels are greatly enlarged, and are necessarily divided during the operation. If they are not ligated they may exude a large quantity of fluid into the cavity of the wound which lifts up the skin flaps and greatly lessens the chances of securing primary union. The lumen of these vessels was in some instances large enough to admit an ordinary small sized probe; they ramify throughout the mass of diseased glands and are intimately connected with them. They closely resemble cutaneous nerve branches, but are readily distinguished from them, in that they have a distinct lumen from which a clear fluid exudes,

and are of a more yellowish color and present a duller surface.

The details of the operation were modified in the different cases according to the particular conditions presented as follows: In cases in which the skin was not at all or but moderately inflamed, one of the two following incisions was made in order to expose the bubo.

First. A *crescentic cut* (as in the accompanying figure *a*), carried well below the area of inflamed skin through the healthy skin. From this line a large flap was dissected up extending to a line well above the diseased glands and exposing



them thoroughly. After their removal the flap was turned down again and its edge sutured on the line of the first incision. In some of these cases drainage by means of sterilized strands of silk, was provided for through an opening below the line of the incision. (Marked *c* in figure.)

Second. A long incision parallel with *Poupart's ligament*, through the skin across the middle of the swelling. The glands being exposed by dissecting the skin from off them upwards

and downwards. After removing all diseased tissue the skin wound was sutured without drainage, in some cases by a buried suture, in others by the ordinary stitch.

Of these two cuts the first is preferable because the glands are more freely exposed by it, but especially because it offers edges of healthy instead of inflamed skin for suture and subsequent healing.

In cases in which the *skin covering the bubo had broken down* to a greater or less extent, the last of the two incisions just described was practiced, but modified by dividing it toward its middle so as *to form an ellipse*, which included the area of necrotic skin, and so removed it. ("B" in figure.)

In the particular cases in which *this* incision was employed there happened to be enough sound skin to allow the edges of the wound to be united after excising the necrotic portion. If the area of skin which has already broken down should be too large to permit this, it would be useless, of course, to attempt to secure union of the wound.

The last modification that was tried in a certain number of cases, was that of *secondary suture*, the sutures being set at the time of the operation, the wound left open and packed with iodoform gauze, the edges of the wound being drawn together at the end of twenty-four or forty-eight hours according as the quantity of fluids exuded from the exposed surface was more or less.

This method may be used, whatever the form of the incision may be, and recommends itself especially in this particular class of cases, in that it allows of the free evacuation of fluids after the operation from a surface which it is sometimes difficult to make dry, and from which it is very difficult to remove all wound infecting material.

It must be said, however, that so far as the results of the operations in this particular series of cases are concerned, no one of these methods of carrying them out was distinctly more favorable than another, failures and successes in securing union by first intention having occurred with each of the various modifications in nearly equal proportions.

In no instance were these operations followed by any deleterious results, and the writer feels justified in urging a more extended trial of this method of treating buboes which are already suppurating than is now in vogue. The one advantage of this method of treatment, when it is successful, over the more usual one of incising and curretting suppurating buboes and letting

the wounds heal by granulation, is, of course, the obvious one of being able to discharge the patient well at the end of a fortnight, instead of at the end of from three weeks to two months.

The average duration in the hospital of the ten cases in which the wounds healed by first intention was sixteen days, the shortest was eleven days, the longest twenty-eight. The average duration in the hospital of the twelve cases in which primary union did not occur, and which healed by granulation, was thirty-four days.

It is difficult to say to what special conditions the failures or successes were due in these cases. As has been said, they were not determined by the particular manner of carrying out the operations, nor could they be referred to the actual condition of the buboes or to their nature, for some of those that seemed the most unpromising united by first intention, whilst others in which there seemed every reason to expect success failed to do so in part, although entire failure did not occur in any, and in the partial failures convalescence was uninterrupted.

The writer advises against the use of solutions of the stronger antiseptics in the wounds, and thinks it preferable to cleanse the wound cavity by thoroughly scrubbing it with sterilized gauze sponges wet with sterilized water, or with a sterilized weak solution of boracic acid or permanganate of potash. Before suturing the wound, if that plan be adopted at once, it should be made as dry as possible, and finally the wounds should be dressed with large, dry sterilized gauze dressing.

Note.—Since writing the above my colleague at the Boston City Hospital, Dr. H. W. Cushing, has kindly reported to me some additional cases in which he adopted the same method of operating. These are four in number. One of traumatic and one of gonorrhoeal origin—in the two others there was no causation noted. In three of these four cases Dr. Cushing obtained primary union of the wound after thorough excision of the diseased tissue. The average stay of these cases in the hospital was seventeen days. In nine other cases in which there was no attempt to secure primary union, but in all of which the diseased tissues were thoroughly excised, the average stay in the hospital was twenty-two days, but all of these cases were discharged before healing was complete.

PRICKLY HEAT.

LICHEN TROPICUS, MILIARIA PAPULOSA, M. RUBRA, ETC.

BY

S. POLLITZER, A.M., M.D.

A N affection like prickly heat which causes only temporary inconvenience to its victims and, however annoying during its continuance, affects neither the general health nor leaves any permanent lesion in the skin, and which, moreover, disappears spontaneously, may well be looked upon as a minor ill, hardly worthy the attention of the physician. It is for this reason, perhaps, that the disease has been almost entirely neglected by dermatologists and that, as a matter of fact, its anatomy has never been studied.

Many authors follow Hebra in looking upon the affection as an eczema due directly to the irritation of sweat which is allowed to remain on the skin; others like Kaposi, as an eczema associated with sweating, not due to irritation but to exudation from overcharged papillary vessels; others again confound the disease with miliaria crystallina, a wholly different affection; while still others, assume the pathological process in prickly heat to be like that of miliaria crystallina,—without, however, basing their assumption on any examination under the microscope.

It seemed to me, therefore, desirable to put an end to this uncertainty and divergence of opinion. With this view I excised during last summer pieces of skin from eight cases of prickly heat. Two of the patients were infants, the others ranged from adolescence to old age. The specimens were taken from the back, the chest, or the abdomen, were fixed in a saturated aqueous solution of corrosive sublimate, hardened in alcohol, and embedded in celloidin or paraffin. In two of the cases serial sections were made. The results of the microscopic examination were on the whole so uniform that it is not necessary to enter into a description of each case.

In the cutis there were apparently no changes, except perhaps that the lumina of the coil glands appeared at times unusually wide. In the papillary layer the capillaries seemed well filled and often there was a slightly increased perivascular leucocyte infiltration. This was especially marked in the cases in which the disease had existed for a considerable time. The rete cells showed no changes, and though the inter-cellular

lymph-spaces appeared distended, there was a striking absence of emigrated white blood-corpuscles among the cells. Here and there in the rete there were large cyst-like spaces which proved to be sections of dilated sweat-ducts. These spaces

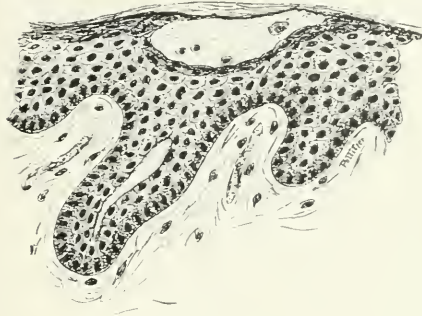


FIG. 1.

were oval or circular, and frequently several of them appeared arranged in an oblique line, one over the other throughout the whole thickness of the rete (Figs. 4 and 5); sometimes a single cyst occurred in the upper layers of the rete, while below it the section of a but slightly dilated sweat-duct appeared (Figs. 1 and 2).

The contents of these spaces was at times almost wholly fluid, containing a fine granular matter and very few epithelial and round cells (Fig. 1); at times the cellular elements were present in considerable numbers (Figs. 2 and 3); at times the entire



FIG. 2.

space was filled with closely packed epithelial and round cells and fragments of nuclei which stained intensely (Fig. 4). When the vesicle appeared in the upper region of the epidermis it was generally flattened into a long ellipse, and as a rule, though not

always, its floor was made of the cells of the str. granulosum. This location, just above the str. granulosum, seemed to be by far the most frequent when there was but a single vesicle, and in this situation its contents were generally clear. The arrange-

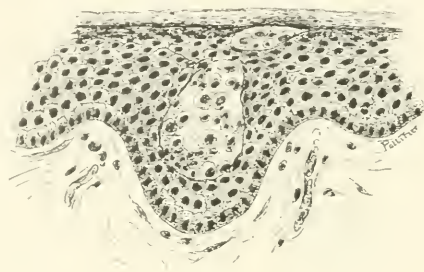


FIG. 3.

ment of these cyst-like spaces, when several of them occurred together, as in Fig. 4, or when a gland-duct appeared immediately below the vesicle, left no doubt as to what these spaces were. But where the entire thickness of the rete showed but a single vesicle it was necessary to make serial sections in order to demonstrate its connection with the sweat duct.

The stratum corneum was almost everywhere thickened, not, however, through increase in the number of cells, but on account of an enlargement of the individual cells. The cells, even in the

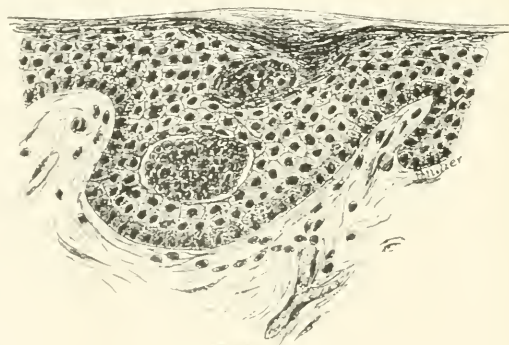


FIG. 4.

uppermost layers, frequently presented themselves not as thin lamellae, but under the vesicular appearance of the horny layer of mucous membrane. The nuclei of the cells were preserved in many places (adding another point of resemblance to mucous

membrane) especially at or near the orifices of the sweat-ducts. The uppermost layers of the str. corneum were frequently lifted up by fluid constituting a vesicle usually with clear contents. These vesicles appeared also to be connected with the sweat-ducts; certainly a sweat-duct could often be seen in line with the vesicle.

En résumé, we have a horny layer swollen by imbibition, a rete malpighii slightly oedematus, and containing cystically dilated sweat-ducts, and a cutis unchanged except in the papillary layer, where the blood-vessels appeared gorged.

It is needless to say that this picture is not that of eczema, nor, on the other hand is it identical with what Haight and Robinson describe in *M. crystallina*. These authors found a perfectly clear vesicle situated wholly in the horny layer. The most striking change found in prickly heat is the cystic dilatation of the sweat-ducts. It is this change which constitutes the chief clinical feature—the minute discrete vesicles. As to the minute papules which are usually described as interspersed with the vesicles, I have not been able to satisfy myself of their clinical existence, and I have seen nothing like a histological papule anywhere in the specimens. A minute cyst deeply seated and filled with cellular elements may simulate clinically a papule; and certain regenerative products to be described later may produce a similar effect. It may be of interest to discuss the probable mode of origin of these cysts.

The cysts, it is evident, belong to the class of retention-cysts and there must be an occlusion of the duct somewhere externally to the cyst. This occlusion occurs evidently in the upper layers of the str. corneum, for the cysts develop at points below this layer and it is hardly likely, the cause being always the same, that the occlusion occurs now in one place now in another. Haight sought to explain the development of the vesicle in *M. crystallina* as resulting from a sudden flood of sweat which, rushing through the spirally twisted canal in the epidermis, compressed one turn of the spiral against another and so produced a valvular occlusion of the duct. Such a sudden out-pouring of sweat occurs, it is true, in fevers—the “critical sweat”—in which *M. crystallina* develops, but we cannot recognize any such factor in prickly heat in which there is more or less constant sweating. Moreover the explanation seems to me faulty, the flood of sweat would occlude the duct at its first spiral turn if at all, and in *M. crystallina* the vesicle is always located wholly in the horny layer. I should rather suggest a

mechanical occlusion by accumulation of epidermis during the fever at a time when there is cessation of the sweat function, and generally but little regard paid to cleansing the skin. *M. crystallina* occurs by far less commonly nowadays (since patients in fevers are bathed, sponged, etc.), than formerly when the skin was entirely neglected. Such an extensive eruption of vesicles as to lead physicians to regard the rash as the essential feature of the fever—*febris miliaris*—is practically unknown to-day.

It is evident that a profuse perspiration alone, with patent ducts, can no more explain the occurrence of retention cysts in prickly heat than in *M. crystallina*; some interference with the outflow is essential. The location of this obstruction must be sought in both cases in the horny layer. The nature of the obstruction in the case of prickly heat appears to me reasonably clear from the microscopic examination. I have described the cells of the horny layer as swollen and their nuclei preserved, the resemblance to mucous membrane being especially marked near the orifices of the sweat ducts. This condition is evidently due to imbibition with water, with sweat. An epidermis which is bathed in perspiration retained as it commonly is by wet underwear, cannot properly cornify; and in imbibing water the cells swell, and swell of course in all directions, laterally as well as vertically. The line of cells, therefore, expanding, may easily be pushed over the orifices of the ducts occluding them at a time when the secretion of sweat is momentarily in abeyance. The next flow of sweat through the ducts would be unable to escape and must naturally cause a dilatation of the duct at a point just below the obstruction. The secretion of sweat continuing the cystic dilatation must grow larger, and larger, and there will result such a condition as is shown in Figs. 3 and 4,—a funnel-shaped spiral canal.

It may be objected that many people who sweat profusely do not get prickly heat, and in those who suffer from the rash not all regions of the skin, not even all those regions which sweat freely, become affected. Perspiration is generally very profuse in the face where, except perhaps under the hat band, prickly heat never occurs. There is one respect in which the horny layer varies in different regions of the body and in different individuals which may serve to explain the predilection of prickly heat for certain regions and individuals, and that is in respect to its oiliness. Cells which are well impregnated with fat cannot imbibe water and therefore will not swell up and occlude the sweat duct when soaked in perspiration. That this

soaking in perspiration will not always cause the cells of the str. corneum to swell will explain why it will not always produce prickly heat. The negro in the tropics sweats profusely, yet does not acquire the rash; his skin is particularly well oiled. The Englishman in India, who takes his "couple of tubs a day," suffers frightfully from prickly heat, perhaps because his frequent use of soap and water reduces the fat in his horny layer to a minimum. No region of the skin is so well supplied with fat as the face; despite the profuse sweating prickly heat does not occur there. I am in doubt as to whether the rash that occurs under the hat band on the forehead is an eczema or prickly heat. Assuming it to be prickly heat, we can find in the very severe conditions of soaking to which the skin perspiring under a close-fitting impervious hat band an explanation of

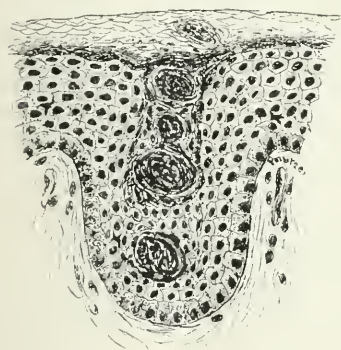


FIG. 5.

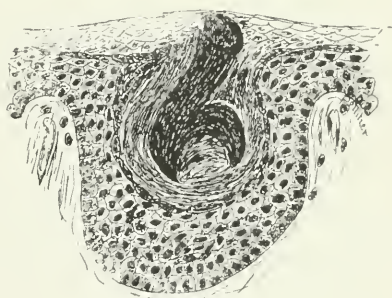


FIG. 6.

the rash occurring here in a region ordinarily well impregnated with oil.

If my view of the aetiology of prickly heat be correct,—that it develops on a skin soaked in perspiration and insufficiently supplied with fat,—we have at hand a means of preventing the occurrence of the rash in those who are subject to it. I have advised a number of patients who suffer every summer from prickly heat to anoint the usually affected regions with a fat, after their morning bath. The fat recommended was for obvious reasons lanolin, to which a little almond oil was added. This application is only a prophylactic measure, and is not to be continued if the rash develops. This treatment will probably throw still more work on the sweat glands; for as Unna has recently shown, the diffusion of vapor of water—the insensible

perspiration—is diminished through a horny layer impregnated with fat. But with patent sweat ducts this circumstance should not produce prickly heat. Of course, after the rash has appeared, the best treatment is a drying application, especially powder, and the avoidance of everything likely to produce sweating.

What becomes of the cysts in the epidermis; and are the obstructed gland ducts restored to their function? With the growth of the epidermis the cysts must, of course, be slowly carried to the surface. But in the meanwhile, their fluid contents have been absorbed, the cellular elements have become packed more and more closely, the cells have gradually desiccated and broken down and we find such a condition as is shown in Fig. 5; a duct of but little more than normal calibre filled up with detritus and scarcely recognizable cellular elements. That this plug of detritus is ultimately passed on to the surface I am inclined to think appears from Fig. 6 in which we see a section of an irregular somewhat spiral-shaped mass in which only an indefinite stratified structure can be made out, the whole staining rather diffusely and vaguely with hæmatoxylin. It is, I think, a further stage in the development of Fig. 5 and the final stage in the restoration of the gland duct.

The illustrations to the paper have been made from pen drawings copied from photographs. Direct reproductions of histological subjects from the photographic negative do not, as a rule, give clear pictures. A pen drawing from the photograph is not so troublesome and not less accurate than a drawing made with the aid of the camera lucida.

21 West Fifty-second Street.

A CASE OF SO-CALLED COLLOID DEGENERATION OF THE SKIN.

BY

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THE following is a brief report of the clinical features of a case which is unique in my experience. The patient was a man in average general health, aged 32, and a coachman by occupation. He came to me in April, 1890, with a peculiar tubercular eruption upon the face, which at first glance looked as though it might be either acne or syphilis. The erup-

tion consisted of numerous nodules, varying from a pin head to a split pea in size, and occupied the cheeks, chin, and space between the eyebrows. The seat of the eruption was precisely that of rosacea, save that a few lesions appeared upon the upper border of the right ear. There were a few comedones on the



nose and forehead. The smaller lesions were firm, flattened, and of a dull red hue. Near the *alae nasi*, where they were especially numerous, there was a tendency to scaling. Many of the smaller lesions were flattened. Those which were rounded upon the surface had a translucent "apple jelly" appearance

and presented a central whitish point at the summit. Some were slightly umbilicated. The larger lesions were softer, and when aggregated formed a tumor from which firm pressure could force out blood and pus. This was accompanied by a peculiar crackling sensation, suggestive of a multilocular cyst. The color of the lesions was a dull red, more like a tubercular syphilide than like the nodules of rosacea. No complaint was made of either pain or itching. The patient gave no history of syphilis nor presented any symptoms of the disease.

The eruption had appeared suddenly and was of six weeks' duration. It had begun in the form of bluish-red elevated patches upon the right cheek. While the face was considerably swollen the nodules developed. Two weeks after the first attack the face became swollen again and more nodules developed. There was a burning sensation at the outset but this had entirely subsided.

The use of the small dermal curette in this case showed the lesions to be very soft and with a decided hemorrhagic tendency. Pressure with the instrument upon one side of a large nodule would cause a gelatinous mass to pop out of the skin, leaving a punched-out hole which bled copiously. If this mass were simply pressed out of the skin with the fingers the lesion would quickly fill with dark venous blood. When a dental burr was used to destroy the lesions upon the cheek it would go through the corium and be plainly felt beneath the mucous membrane by a finger inserted in the mouth. Where the lesions were aggregated, as about the nose, the curette would leave a reticulated ulcer—with a number of pits or cells containing gelatinoid contents, and looking like seeds imbedded in the skin.

The right side of the face upon which the curette was used improved under the treatment, and the lesions upon the left side at the same time grew paler. In June the right side of the face was quite smooth, and the left side, which had not been treated, had also greatly improved in appearance. A notable hemorrhage still occurred, however, whenever the curette or burr was used.

The patient now went to the country for the summer, and when I saw him again in October I found that the lesions had gradually disappeared without further treatment and left small pits. In November the face looked as though pock-marked, even on the side where the curette had not been used, and only a few indistinct lesions were to be found upon the right ear.

From a careful examination of this case it soon became evi-

dent that it was neither syphilis nor a simple inflammatory affection. A provisional diagnosis, made during treatment of the case, was that of *acute disseminate lupus*, and Dr. G. T. Elliot, who kindly made a microscopic examination of one of the lesions reports that the tissue was of a decided tubercular character. The similarity of the case, however, to those which have been reported by Wagner, Besnier, Liveing and others, its characteristic location, and the spontaneous disappearance of many of the lesions led me to report it as one of colloid degeneration of the skin.

A CAST OF THE PELVIS AND CALYCES OF THE KIDNEY COMPOSED OF FIBRIN PASSED SPONTANEOUSLY IN THE URINE. PROFUSE RENAL HÆMATURIA—WITH REMARKS IN REGARD TO EXPLORATIVE NEPHROTOMY, AND THE VALUE OF CYSTOSCOPY IN DIAGNOSIS OF RENAL DISEASES.¹

BY

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ALTHOUGH the report of a single unusual case may be interesting, it is rarely of very great clinical value, unless it may be taken as illustrating a general principle in diagnosis or treatment. The following history is reported because it is an example of the cases of renal disease in the diagnosis of which the cystoscope can be used with advantage, and also because it presents certain features which I believe are unique.

History.—On December 3d, 1891, I was asked by Dr. Hollister, at that time one of the House Surgeons of Bellevue Hospital, to examine a patient for the purpose of determining the cause of profuse hæmaturia from which the latter had suffered for some months. On the following day, at my request, the patient was brought to my office, and I then obtained from him the following history: He was 22 years of age; single; a trained nurse by profession. His parents were alive and well; family history good. Prior to May, 1891, he had enjoyed good health, excepting that four years before he had had an attack of urethritis which had lasted three weeks, and was complicated by a suppurating inguinal bubo. Early in May he began to suffer from symptoms of his present trouble, which began by the passage of bloody urine. This symptom appeared suddenly and without known cause;

¹ Paper read before the New York Academy of Medicine, April 7, 1892.

the blood was first noticed in the morning urine. It was very dark in color and was intimately mixed with the urine; but at the close of the act of micturition a small quantity of thick blackish fluid escaped from the urethra. There was no frequency in passing water and no pain. There was no history of malaria.

At this time, by order of his attending physician, the patient was confined to bed for seventeen days. During the greater part of this time blood was passed constantly in the urine. About a week after the first appearance of the hæmorrhage, he had acute retention of urine. For this he was treated by anodynes and a hip bath. While in the latter he passed a quantity of very dark blood-stained urine, and after much straining a teacupful of large blood-clots. Three weeks after the first appearance of the blood, the urine became clear, and remained apparently normal for two or three weeks, then the blood reappeared, again without any assignable cause. During this second attack, the first urine passed in the morning always contained the most blood, and on certain days this was the only urine passed in which blood was apparent. From this time until the middle of July blood was passed in the urine in varying amounts. About the middle of July he had an attack of renal colic; the pain was on the right side and lasted for about two days. During the attack a very large quantity of bloody urine, together with some uric acid sand was passed. From this time until I saw him blood was intermittently present in the urine. The first urine passed in the morning always contained the most blood.

The following report, furnished to me by Dr. Hollister, shows the varying character of the hæmaturia from November 25th to November 28th, inclusive:

November 25th, A. M., urine bright red; smoky; acid; specific gravity 1,010; contains albumen. *November 26th*, A. M., urine dark brown; turbid opaque; acid; specific gravity 1,018; contains albumen. *P. M.* urine pale yellow; cloudy; acid; specific gravity 1,010; contains no albumen. *November 27th*, A. M., urine dark brown; turbid; specific gravity 1,025; contains albumen. *P. M.*, urine dark brown; opaque and turbid; acid; specific gravity 1,009; contains albumen. *November, 28th*, A. M., urine red; clear; faintly acid; specific gravity 1,009; contains albumen. *P. M.*, urine dark yellow; turbid; acid; specific gravity 1,017; contains albumen.

Physical Examination.—I examined the patient with the following result: The urine was passed into three different glasses. That in the first contained the most blood. A small, dark-colored clot was expelled with the first gush of urine. The second specimen contained very little blood, and the third was almost entirely free from blood, and was of a dark yellow color. The patient stated that never until that time had he passed

blood with the first gush of urine only. I introduced a soft, velvet-eyed catheter, and washed the bladder with boiled water. The fluid returned clear, and was not discolored by any blood. Sensibility of the bladder to contact was slightly increased; sensibility to tension was normal. I examined the patient with the urethroscope, passing the tube well into the prostatic urethra. This caused a free hæmorrhage from the mucous membrane in this part of the canal. The prostatic and membranous portions of the urethra were abnormally red and congested. Cystoscopic examination showed a hyperæmic condition of the mucous membrane of the bladder. Examination of the kidneys by bi-manual palpation revealed a point of great tenderness over the right kidney. Pressure over the left kidney produced no pain. The patient stated that exercise and work had no effect upon the hæmorrhage.

Suspecting that the source of the hæmorrhage was from the right kidney, I emptied the bladder, having first washed it perfectly clean, and asked the patient to walk about for an hour. When he returned I at once passed a soft catheter into the bladder and withdrew about two ounces of bright red bloody urine. The amount of blood in this fluid was too great, in my opinion, to come entirely from the prostatic urethra in so short a time. The patient was directed to drink plenty of Poland water, to take moderate exercise, and to pass his water at each micturition in three portions and bring to me all the specimens for inspection. This was done and with the exception of the urine passed immediately before retiring, which contained a very small amount of blood, all the specimens were much discolored, varying from a very dark black to a bright red. In some of the specimens there were a few small blood-clots.

Examination of urine.—The specimens of urine were examined with the following result: The specific gravity varied from 1,016 to 1,025. The reaction was excessively acid, except when there was a large quantity of blood; the color varied from pale yellow to red and at times was a brownish black. Albumin was present in proportion to the amount of blood. The microscope showed a few pus cells, and a number of red blood corpuscles even when the urine was not discolored. Uric acid crystals were plentiful in the morning urine. There were a few hyaline, and a number of mucous casts or cylindroids.

Cystoscopic examination.—A rapid examination showed that the upper and lateral walls of the bladder were healthy, excepting that the vessels were somewhat dilated. The base and trigone, and the mucous membrane about the internal urethral orifice were somewhat reddened. The orifices of the ureters were found without much difficulty, and blood could be seen flowing from the right kidney. The cystoscope being withdrawn, I made a very thorough bi-manual examination of the

right kidney, pressing firmly down upon it and endeavoring to outline its borders. The patient complained of great pain during the examination, this was very severe at the point of tenderness above alluded to. Shortly after the examination he was seized with a sharp pain over the right kidney, extending down the course of the ureter. The right testicle was retracted. Urination was increased in frequency. During this attack the urine was scanty and contained very little blood. The pain lasted two hours and then ceased suddenly. The urine passed immediately after the pain stopped contained blood and was of a dark brown color. During its passage the flow was suddenly arrested and the patient was seized with a severe pain in the deep urethra. After much straining he suddenly passed what he supposed to be a large clot of blood, together with several ounces of bloody urine. The clot proved to be a cast composed of fibrin of the pelvis and calices of one of the kidneys. It consisted of a solid central portion, corresponding with the renal pelvis, and joined to this were eight off-shoots, which were more or less perfectly formed casts of the calices. (See cut p. 66.) Some of these off-shoots were patulous, so that a probe could be introduced into them. Twenty-four hours after the passage of this body, there was no blood in the urine, but at the expiration of this time blood re-appeared, the color of the urine being bright red. As at other times, the hæmorrhage was most marked in the morning.

A few days afterwards I made a second cystoscopic examination, at which Dr. L. Bolton Bangs was present, and we both were convinced that the principal source of the hæmorrhage was the right kidney. The appearance presented by the entrance of the blood from the ureter was like a small red wave which rapidly became diffused throughout the clear fluid in the bladder. We were also convinced that the hæmorrhage from the prostatic urethra was due principally to the introduction into it of the straight urethral tube.

For several weeks after this examination, I continued to examine the urine from time to time. Blood could always be found in it by microscopic examination, even when it was not present in sufficient quantity to discolor the fluid. About a month after my second cystoscopic examination the patient was suddenly seized with intense pain in the right kidney, passing down the course of the ureter, and especially severe at a point a little below and to the right of the umbilicus. The urine was diminished in quantity; and contained a large amount of blood. The color was sometimes a bright red and at other times very dark—almost black. During this time a number of clots were passed. Pressure over the right kidney occasioned great pain.

In spite of treatment the severity of the pain remained unabated. I therefore decided to explore the right kidney through

a lumbar incision, believing that the pain and hæmorrhage were due to the presence of a calculus. On February 12, 1892, I performed the operation, assisted by Dr. George R. Woolsey and the House Staff of Bellevue Hospital. The fatty capsule of the kidney was normal. The kidney itself was of a dark red color. The fibrous capsule was adherent in part. The kidney seemed somewhat enlarged. I first explored the posterior surface of the kidney, and then, having stripped the organ, passed my finger first above and then below and then around the upper border, and pressed it firmly between my fingers. No spot of hardness could be detected. In stripping the upper border, the substance of the kidney was slightly torn, but the hæmorrhage was trifling. The pelvis of the kidney seemed to be normal but the ureter was a little larger than common. The latter was examined to a point nearly corresponding with the brim of the pelvis. I then systematically explored the kidney, by puncture, thrusting a needle into its substance. Over twenty punctures were made in this way, counter-pressure being secured by passing two fingers around the outer border. I could detect no stone, nor discover anything to account for the hæmorrhage. At my request, both Dr. Bangs and Dr. Woolsey examined the kidney, and concurred with me in my opinion that no stone could be detected, at least without cutting into the kidney. This I did not feel justified in doing for reasons which I shall state further on. Drainage tubes having been inserted, the wound was closed and a dressing applied. Following the operation, the patient was kept thoroughly under the influence of morphia. He complained of little pain over the right kidney. For several days it was necessary to use the catheter to empty the bladder on account of the urine being retained by spasmodic contraction of the compressor urethræ muscle.

On February 19th, a week after the operation, about half an ounce of very turbid urine was drawn by the catheter; this was examined and was found to contain a large quantity of pus. The pus apparently came from the kidney, as the bladder was not appreciably inflamed. After the operation the hæmaturia diminished in quantity and finally disappeared. The lumbar incision healed under two dressings. The patient was kept in bed for three weeks and was then allowed to move about, the kidney being supported by a firm binder. The patient was discharged on March 14th. On March 17th he had a moderate attack of renal colic, the pain being most severe along the course of the right ureter. The pain increased in severity for several hours. The patient was put to bed and treated in the usual manner, but as the pain continued, I made, on March 23d, a cystoscopic examination, in order to discover whether there was any stoppage of the urine through the right ureter. The ori-

fice of this ureter was large, and appeared as a slit in the bladder wall. I watched this for several minutes, and failed to discover any flow from it. From the opposite ureter the flow of urine could be easily detected. Judging that there was some obstruction in the right ureter, I ordered the patient to drink as much Poland water as he could take, together with five grain doses of piperazine every four hours. About six hours after the examination was completed, the patient passed a quantity of rather turbid urine, together with a firm clot of fibrine which was of a dull brown color, resembling the cast of the pelvis and calices, to which allusion has already been made. At the same time the patient passed a large amount of uric acid sand, free crystals being detected in several specimens of urine during the attack. Since this time the patient has continued in good health. The urine is now entirely clear: it contains neither blood nor pus. He seems in every way perfectly well. He still continues to take large quantities of dilutents, as the stoppage of these is immediately followed by the appearance of large numbers of uric acid crystals in the urine.¹

Remarks.—In the history of this case I desire to call special attention to the following points: (1) As to the cause of the hæmorrhage. (2) As to the formation and spontaneous discharge of the cast from the renal pelvis. (3) As to the cessation of the bleeding after the operation. In addition to these there are two other questions suggested by the history which merit consideration at this time; viz: (1) as to the advisability of opening the kidney in cases in which a calculus is suspected, but where its presence cannot be detected by thorough digital exploration or by repeated and systematic puncture; and (2) as to the use of cystoscopy in determining the source of hæmaturia.

Renal hæmaturia occurs as a symptom in a number of different diseases. It may appear as the result of gravel and of calculus, of tuberculosis, of cancer, of non-malignant growths in the pelvis of the kidney, of nodular pyelitis, and of malarial poisoning. The amount and appearance of the blood and the character and duration of the hæmorrhage vary, and a positive diagnosis cannot be made from these alone.

In the case reported above the peculiarities of the hæmatu-

¹ Note made December 14, 1892. Since writing the facts stated in the foregoing history the patient has been under my observation until the past fortnight, and has been in perfect condition as far as any reappearance of symptoms referable to the kidney. During the past week he has passed urine containing blood upon two occasions. The hæmorrhage was slight and was associated with the discharge of large numbers of uric acid crystals. There has been no return of pain. For several weeks the patient has taken very little water and has indulged moderately in alcoholic drinks.

ria were its long duration, over nine months, its intermittent character, the very large quantity of blood, and the almost entire absence of other diagnostic symptoms.

The symptom appeared in the month of May, the first attack lasting seventeen days, but although such a large quantity of blood was passed, there were no other symptoms until July, when the first attack of renal colic occurred, which was caused apparently by the passage of clots.

It is true that a calculus may form in the kidney or in its pelvis or in one of the calyces, and not be detected, in fact not produce symptoms for years, but a calculus causing such profuse hæmorrhage as in this case, should, it would seem, also give rise to pain. But prior to the passage of the cast the patient suffered no pain or discomfort except upon the single occasion referred to above. This taken in connection with the duration and intermittent character of the hæmorrhage is peculiar.

The fact that more blood was always found in the morning urine, after rest, is characteristic of renal hæmorrhage as distinguished from vesical hæmaturia.

When the bladder is the source of the hæmorrhage, the latter is increased by exercise, jolting, etc., which is not usually the case when the symptom is of renal origin, although in some cases of hæmorrhage from the kidney due to calculus, or to cancer, the blood is increased by exercise; but in such cases rest has little effect. It is a point of some importance, I think, that vesical hæmorrhage, whatever the cause may be, is usually increased by exercise, and lessened by rest, whereas rest has little effect upon hæmorrhage from the kidney.

The passage of a cast of the pelvis and calyces is positive evidence of the renal origin of the hæmaturia, but this is a unique occurrence so far as I know. An examination of the cast was made by Professor Dunham of the Carnegie Laboratory and it is, according to his report, composed of fibrine. There must have been complete or partial retention of urine in the pelvis, at some period, and this was probably caused by a blood clot in the ureter. This seems to be a more likely supposition than obstruction by a calculus.

The patient is confident that he never has passed a calculus, and I am convinced, both by the absence of any bladder symptoms, by examination of the bladder and by cystoscopy, that there was no stone in the bladder. The diagnosis of renal calculus in this case made previous to the operation, was based upon

the character of the hemorrhage, upon the fact that uric acid crystals were passed during the attacks of renal colic from which the patient had suffered and upon the absence of any symptoms characteristic of disease of the kidneys. The failure to find a calculus at the time of the operation cannot be taken as entirely excluding the presence of a stone. Several cases have been reported in which no calculus could be detected, al-



FIBRIN CAST OF RENAL PELVIS AND CALYCES.

though previous to the operation all the symptoms of the disease were present. Morris, in his hand-book of kidney diseases, reports a most interesting case in which, having failed to discover a calculus in the kidney, after a lumbar exploration he removed the latter. After its removal the kidney could be squeezed between the fingers and even placed upon the table and pressed upon by the hand, without detecting any spot of unusual hardness, and yet, when the kidney was opened a cal-

culus as large as a marble was found in the substance of the kidney.¹

The propriety of opening a kidney where the presence of a calculus is suspected, when the latter cannot be located in any other way, is a question upon which there is still some difference of opinion. I believe that, as a rule, when calculus cannot be detected, after exposing and stripping the kidney either by digital exploration of the kidney or by puncture, that it is not best to open the kidney. In order to discover a calculus under these circumstances no incision is of value which does not open each of the calyces. To do this increases the danger of the operation materially, and owing to the fact that the hæmorrhage disappears in many of these cases after simple exploration of the kidney, provided that the latter is thoroughly stripped, furnishes an additional reason for caution in doing this. The cause of the hæmorrhage in the case reported above cannot, I think, be positively stated. In endeavoring to account for it the two most natural suppositions are, first, the presence of calculus and, second, the passage of uric acid crystals. As has been already stated, the failure to find a calculus at the time of the operation, cannot be taken as an absolute proof that there was none, the presence of uric acid crystals at intervals and the symptoms favor this diagnosis. The second supposition, viz., the passage of crystals of uric acid, seems to be the most reasonable explanation, in view of the recent return of the hæmaturia.

Cystoscopy in the Diagnosis of Renal Disease.—Before closing this article I desire to say a few words as to the use of the cystoscope in the diagnosis of surgical diseases of the kidney. I do this not so much because the subject forms a necessary part of the discussion of the case which I have reported, but mainly because I think there is a tendency on the part of many to underestimate the value of this method and I believe this is due as much to the premature enthusiasm of some of its advocates as to the unfavorable opinions which have been expressed. I shall confine my remarks to the use of the cystoscope in the diagnosis of renal affections and shall not say anything as to its value in diseases of the bladder. The information that can be obtained by the use of the cystoscope will depend, of course, upon the skill and experience of the operator. This, however, is true of all special instru-

¹ Morris, Dis. of Kidney, p. 527.

ments, and the argument against cystoscopy, based upon this fact, might be used with equal weight against the use of the laryngoscope or the ophthalmoscope. I believe that any one who can use intelligently any instrument for exploring the bladder and the urethra can easily learn to use the cystoscope. The technique of cystoscopy can be obtained now without difficulty from the literature of the subject, and I need not now call your attention to this. One objection urged against the cystoscope is, that an anæsthetic is necessary and that the examination of the bladder, therefore, must be considered in the light of a more or less serious operation. So far, however, as the diagnosis of diseases of the kidney is concerned, the necessity for an anæsthetic is the exception, not the rule. In cases where the urethra or the bladder are inflamed, or are extremely sensitive, an anæsthetic may be required, but the local use of cocaine in the urethra will very often render any other anæsthetic unnecessary. Even in the cases in which an anæsthetic is required it is not so much the introduction and presence of the instrument which calls for its use, as it is that without the anæsthetic the bladder cannot be sufficiently distended.

The use of the cystoscope in the diagnosis of diseases of the kidney is confined almost exclusively to observing with it the orifices of the ureters. We have yet much to learn, I believe, in regard to the appearances presented both in health and in disease. The following, however, I think are the principal points which we can ascertain at the present time.

1st. We are able by cystoscopic examination to ascertain the anatomical condition of the ureteral orifices. The shape and appearances of these vary somewhat even in health. In some cases the orifice is round and in others it resembles a slit. Dilation of the ureter can often be detected by the altered appearance of the orifices, but this is not always a trustworthy sign. Sometimes the ureter may be dilated without the orifices being enlarged. When, however, there is a marked contrast between the size of the ureteral orifices, dilation of one of the ureters may be assumed.

2d. We are able by the cystoscope to observe the character and force of the flow of urine from the ureter. To interpret, however, this symptom some experience is necessary. It should be kept in mind that the action of the kidneys is alternate; that the flow of urine from each ureter into the bladder is intermittent. The urine may enter the bladder from the ureter either drop by drop or it may be forced in by a single jet.

In a case in which I recently catheterized the ureters, I was able to make observations in regard to this point for a period of twenty-four hours. The diminution in the flow of urine from either ureter is, therefore, not of much value as an aid to diagnosis. When, however, we find a marked diminution in the flow from either ureter under conditions in which the functional activity of the kidney should be increased, as after the administration of diuretics, or after the patient has taken a large quantity of fluids, some obstruction to the outflow or some disease of the kidney may be suspected. When the flow from either kidney entirely ceases, however, we have a symptom of great value in forming a diagnosis, but, in order to be confident that the flow has entirely ceased from either kidney, it is necessary to observe the ureteral orifices upon the suspected side for several minutes. When the urine enters the bladder upon either side, drop by drop, the flow cannot be detected by the cystoscope, except by observing the muscular contraction and alteration in shape of the ureteral orifices which occurs at the beginning and at the close of each expulsive act.

When the orifice of the ureter on one side is in action, that upon the other side is in repose. In a case which I recently examined for Dr. R. J. Wylie, who requested me to give an opinion as to the character of the urine flowing from each kidney, I received no information in regard to the condition of the patient before the examination. The patient was a woman, and the examination was made in Dr. Wylie's Ward in Bellevue Hospital. The urine flowing from the left kidney was perfectly clear and was expelled forcibly in jets. The period between each jet was a little over a minute. The ureter on the right side I observed for fully five minutes but could detect no movement at the orifice nor was any urine expelled during this time. I was able at the same time to demonstrate these facts to Dr. Wylie and to the members of the house staff. In this case nephrotomy had been performed upon the right kidney and at the time of the examination all the urine from this kidney escaped by way of the lumbar incision.

3d. The most important information, however, which the cystoscope furnishes us is as to the presence of blood or of pus in the urine as it enters the bladder. The presence of either can be detected with entire accuracy and where only one kidney is diseased a differential diagnosis can be positively made. The detection of pus in the urine by the cystoscope is some-

times difficult, especially if there is much cystitis, because if there is much pus from the bladder the fluid is likely to become cloudy and so obscure the field of vision. If, however, before making the examination, the bladder is thoroughly washed much of the difficulty is removed.

Of course, disease of the kidney may occur without their being either blood or pus in the urine at the time of the examination.

All of the points to which I have just called attention I have personally observed, but I believe that we have much yet to learn in regard both to the appearances which can be observed by the aid of the cystoscope and their interpretation. There are, of course, cases in which the cystoscope either cannot be used to advantage or in which the information which it would furnish would not compensate for the pain and risk of using it. Where there is much inflammation of the bladder, the distention to which it is necessary to subject it, in order to make a satisfactory examination, is likely to do harm, but in cases in which the cystoscope can be used and in which the diagnosis is doubtful, I believe the examination should never be omitted. There is a much wider field for cystoscopy as an aid to diagnosis than is sometimes admitted by those who are unfamiliar with its use.

REPORT OF A CASE OF PEMPHIGUS FOLIACEUS.

BY

ALFRED E. REGENESBURGER, M.D.

San Francisco, Cal.

S. M., aged 50 years, a native of Germany, whose family history presented nothing noteworthy, was a healthy man who had never received any injury or been sick until the beginning of January 1892. At that time he was taken with the grippe, from which he recovered after a two weeks' illness, being left somewhat weakened. He then went to New York on business. While there, during the last few days in January, he noticed the appearance of several bullæ on the front part of the chest, over the sternum, which caused him little or no inconvenience. These bullæ which were quite tense, were a little larger than the size of a hazelnut and contained a sero-purulent fluid, having a straw yellow color. After some

time, they burst and left the epidermis hanging in shreds. Having completed his business, he returned to San Francisco, where he arrived on February 12, 1892. The eruption having increased in extent during all this time, he called in the family physician, Dr. Joseph B. Haggin, who took charge of the case. No improvement being discernible after a week's treatment, I was asked by Dr. Haggin to see the patient in consultation with him on February 18, 1892. Upon my first visit on that date, the front of the chest and abdomen was found to be covered with shreds of epidermis, under which the corium was in an erythematous condition and covered with an ichorous semi-purulent secretion. This secretion did not possess the property of stiffening linen and being less plastic than that of eczema, did not dry into eczema-like crusts, but, later on, it formed thin papery crusts or scales which might well be likened to French pastry. Where the skin was not affected, bullæ soon made their appearance, and such characteristic ones, as to make an error in diagnosis impossible. These bullæ were tense and of the size from a hazelnut to that of a chicken's egg and were filled with a straw colored yellow liquid. After a longer or shorter period they were ruptured by the patient's movements or by his scratching or picking at them. The fluid contained in the bullæ showed an alkaline reaction. Some of the fluid was used to make cover-glass preparations, which were given for examination to the well-known and skilful bacteriologist, Dr. S. M. Mouser, of this city. The bacteriological examination showed no special micro-organism, the streptococcus of pus only being found. The patient's back had been covered by bullæ and presented an erythematous surface upon which were situated shreds of epidermis and papery thin scales. Characteristic bullæ were observed scattered here and there upon the upper and lower extremities. The case remained in this condition for about a week, the monotony broken by the fresh accession of a bulla, here and there, on different parts of the cutaneous envelope not already affected. During this time the patient complained once or twice of considerable itching, but that lasted only a day or two and then disappeared entirely. On February 25, 1892, there was a great rise in temperature accompanied by a very rapid pulse. At the same time slight symptoms of gastro-intestinal disturbances were manifested during that period. After three days the pulse and temperature were again about normal. On February 28, 1892, the pulse was 86 and the temperature 98½° F. Coincident with this state of things, the tongue was

found to have been invaded by the disease. During the course of this case the febrile state recurred several times, seeming to precede each new accession of bullæ. This continued until every part of the skin, except the palms of the hands and soles of the feet, was covered by the eruption or its results. By March 1, 1892, the extremities, except the palms of the hands and soles of the feet, which remained free from the disease until the end, were covered by the eruption. One bulla on the left leg requires special mention. It covered the skin over the entire belly of the left gastrocnemius muscle, having a surface area of three inches by four inches and containing two to three ounces, if not more, of the same sero-purulent secretion found in the other bullæ. On the same date a small bulla was seen to have formed on the conjunctiva of the left eye, a very rare circumstance. A few days later, on March 4, '92, every part of the cutaneous envelope, except that of the soles of the feet and palms of the hands, was affected. At no time were any of the bullæ surrounded by a red areola. They consisted of an elevation of the epidermis being comparable in the beginning of their evolution to a blister. Some of them became flaccid before rupturing. It must also be stated that defluvium capillorum took place. To complete the description the presence of a musty, sickening odor must not be forgotten. A fertile imagination might perhaps ascribe to it certain diagnostic characteristics, as has been done by some authors to those of favus, variola and other diseases. The patient's general condition up to this time was pretty fair. Periods of mental depression and a general indifference to every thing being sometimes noticeable. On March 16, '92, signs of great improvement in the general state of the patient made themselves manifest; but unfortunately they did not last long, for on March 18, '92, fever again occurred and the patient began to suffer intensely from insomnia, which soon led to the whole nervous system being broken down. The patient now presented a pitiable sight, whimpering, moaning, screaming, and semi-delirious, and every movement causing him pain (forcibly reminding one of Hebra's description of these cases). He was unable to remain quiet or to rest in any position for a moment with comfort; he prayed for death which came to his relief on March 26, 1892. No autopsy was held. The case was treated with quinine, as much as 15 grains being given during the day, without any success. Arsenic, in the form of Fowler's solution, was then substituted, the initial dose being five drops three times a day. The dose was increased up

to twelve drops three times a day, when it was thought best to suspend its administration, as it began to give rise to the physiological effects of the drug. After having been left off for a few days, it was again tried and carried as far as advisable. No good results having been obtained from its employment, the tincture of *avena sativa* was tried at the suggestion of Dr. Geo. Henry Fox, the well known dermatologist of New York, City, whose opinion had been asked by the patient's brother, without obtaining any good from it. Beef tea, milk with lime water, stimulants with supporting treatment and narcotics as the symptoms required, constituted the general management of the case. Locally, soothing ointments, such as the diachylon ointment of Hebra, zinc ointment with a little tar added, and dusting powders consisting of iodoform and starch and oxide of zinc and starch, and boracic acid lotion for the affected conjunctiva, were all used with great relief to the patient. On March 22, '92, Drs. S. M. Mouser and Adolph Aronstein were asked to see the case. At that time, as Dr. Aronstein very correctly observed, no one without a history of the case could have made a diagnosis from a casual inspection. There was not a bulla to be seen. The entire cutaneous surface except the soles of the feet and palms of the hands, and even they showed a tendency to take on the morbid process, presented an erythematous appearance, glazed over and covered by fine papery scales or shreds of epidermis. New epidermis never was formed on the affected parts. The universality of the eruption, the absence of infiltration and character of the crusts and scales, might, however, even then have led to a correct opinion being formed. To my mind it showed some analogy to pityriasis rubra or dermatitis exfoliativa. It was suggested on March 22, '92, that as everything possible had already been done without the patient getting well, that the constant immersion in a bath, as recommended by Hebra, be essayed. This authority claims to have saved four cases by this treatment. He kept one patient in the bath 100 days, and nine months later, the same patient had a relapse and was again subjected to the same treatment for 109 days and was cured. Good results and cures were had in three other cases where the subjects remained in the bath 76, 47 and 26 days respectively. A full description of this method of treatment is found in Hebra's writings. The bath treatment was tried in this instance but with no success.

This case is worthy of being reported and placed on record for the following reasons :

1st. The rarity of its occurrence, a fact upon which all authorities are agreed. Hebra places its frequency at one case in 10,000 cases of skin diseases, while Anderson encountered two cases of it among 24,891 persons afflicted with cutaneous affections. These figures will give a good idea of its rarity. It is the second case that I have met with. The other one I saw in 1878 in Professor Besnier's wards at the Hospital St. Louis, Paris, France. It also ended fatally

2d. The extensive area of surface involved. Every part of the cutaneous envelope, except the palms of the hands and soles of the feet, and these even showed a tendency to participate in the morbid process, besides which the mucous membranes were not entirely spared. The conjunctiva of one eye and the buccal cavity, as we have seen, not escaping, and what is more, judging by the gastro-intestinal symptoms which occurred during the progress of the disease, it is very likely that the mucous membrane of the gastro-intestinal tract did not remain free from it.

3d. Difficulty of sometimes differentiating in the beginning pemphigus foliaceus from pemphigus vulgaris. This case proving the correctness of Lesser's statement that a case of pemphigus foliaceus may assume, in the beginning, the appearance of the vulgaris variety; and also that the main differential signs between the two varieties consist therein that in pemphigus foliaceus the epidermis is not reformed, but the skin presents an excoriated condition and is covered with shreds of epidermis, and in cases where a good deal of secretion is exuded with crusts, the flaccidity of the bullæ alone not being pathognomonic. In this case most of the bullæ were not flaccid, only the minority were so.

4th. Etiology unknown. Nothing to give us any information for its cause. It is not probable that the weakness following the grippe could have produced it. Bacteriology has not helped us to clear up its cause. In this connection I may be pardoned for copying here the following extract from a paper of mine entitled, "A few stray histological and bacteriological facts of some diseases of the skin," read some months ago before the San Francisco Bacteriological Society, as it is of sufficient interest to warrant it: "Some have supposed that pemphigus might recognize as an etiological factor some particular micro-organism. The fluid contained in the bullæ has been utilized for the purpose of making cultures of the supposed micro-organism. Failure has been the lot of most of those who

made the attempt. The erudite and skilled president of this Society, Dr. S. M. Mouser, informs me that in a case of this trouble, which was under his professional care, he made many trials, and that with the utmost of care with negative results. Those who succeeded did not produce identical cultures. Bacteriology has as yet shed no light upon it."

5th. The presence of a musty disagreeable smell to which a pathognomonic value has been attributed by Cazenave.

6th. Ineffectiveness of the internal remedies, especially of arsenic and quinine. In the absence of any more promising drugs they deserve to be tried in every case. While they did no especial good in this case, still I believe that they are the only ones from which we can expect to derive any benefit at the present time with the knowledge we now possess of this disease and the drugs used for its treatment.

7th. The bath treatment. True, it did not save the patient, yet it was the consensus of all the medical gentlemen who saw the case, that it should always be tried after having used without avail arsenic and quinine, for a reasonable time.

8th. The fatal ending of these cases. A few are recorded where the patients have recovered, notably Keyes's case quoted by Piffard. In spite of recoveries from the disease having occurred we are justified in looking upon it as a very lethal affection and in giving a very guarded prognosis, the more so if a large surface be involved. Indeed I believe if so large a surface is covered as in the case here described, recovery to be out of the question.

No. 116 Grant Avenue.

Society Transactions.

NEW YORK DERMATOLOGICAL SOCIETY.

219TH REGULAR MEETING.

DR. A. R. ROBINSON *in the Chair*.

Case for Diagnosis.—DR. FOX presented a patient, 45 years of age, born in Ireland, a watchman, with peculiar lesions distributed almost over the entire body, which at different times have suggested quite different diseases for a diagnosis. The lesions are formed by round or oval patches, sometimes red, moderately infiltrated, with raised border, sometimes scales, sometimes

pigmented, leaving the skin in an atrophic condition ; some patches have disappeared. The eruption does not cause any itching, in cold weather it seems to become worse. It began when the patient was a boy, after he had suffered for some time from fever.

DR. SHERWELL said that the case very much resembled an eruption from ergotism, which he had observed in a woman who had been taking large doses for a long time under misunderstood directions of her physician.

DR. KLOTZ thought that the round shape and well-defined border suggested the parasitic nature of the affection.

DR. FOX replied that the process was rather deep-seated for a parasitic affection. He again called attention to the difference in the clinical appearance at different times, that the patches were now raised, now depressed, leaving pigmentation and atrophy.

DR. ROBINSON doubted the parasitic origin, from the fact that the patches appeared at once as fully developed ones, and did not afterward increase at the periphery.

DR. FOX stated that several patches had done so (increased peripherally).

Case for Diagnosis.—DR. FOX presented a woman, 64 years of age, of rather cachectic appearance, showing numerous papular lesions on the face, neck and arms, partly disseminated, partly grouped, here and there in annular shape, surrounding a depressed, pigmented center. Some of the lesions were particularly smooth and shiny on top, resembling papules which had been described as lichen obtusus. The eruption on the neck greatly resembles lichen planus, while on the face it looks more like a syphilitic one.

DR. JACKSON, when he saw the case the day before at the Vanderbilt Clinic, at first thought that it was one of syphilis. Closer inspection, however, made him think that it was one of lichen planus. He thought, too, that the distribution over the face and arms alone was rather unusual for an early eruption of syphilis, as this must be, if syphilis.

DR. MORROW believes the case to be one of syphilis. He could not see any papules perfectly characteristic of lichen planus. The limited distribution of the eruption was not so very unusual in syphilis. The history given by the patient, mentioning different attacks of sore throat and the glandular swelling, particularly in the neck, confirmed the probability of the specific nature.

DR. KEYES would not make a positive diagnosis. He had seen a case with similar patches covering the entire body ; some spots certainly look very much like syphilis, but not surely convincing.

DR. WEISSE regards the case as one of syphilis, and would make a test by treatment.

DR. SHERWELL considers the case one of syphilis. He could not see any characteristic lesions of lichen planus. The limited distribution would not decide against syphilis. He had observed a case of undoubted syphilis, but without subjective history, in which there were only two widely separated lesions present on the entire body and limbs.

DR. ALLEN's diagnosis is that of syphilis, without any suggestion at all of lichen planus. The history of the case seems to confirm the presence of syphilis.

DR. LUSTGARTEN considers it a syphilitic eruption belonging to a comparatively early stage, not longer than six months to a year after infection, as the coincidence of the very numerous disseminated and grouped lesions shows. Some of the nodes have the true gummatous character. The age and the cachectic condition account for the irregular development of syphilis. He cannot find anything of lichen planus in the eruption.

DR. FORDYCE considers it a syphilitic eruption with no lichen planus.

DR. CUTLER thought it a case of syphilis. Some patches, however, reminded him strongly of lichen planus, particularly on the neck, while the face was more like syphilis; some of the papules seemed to be umbilicated and of a violaceous hue, suggesting lichen planus. It might be a combination of both syphilis and lichen planus.

DR. KLOTZ has no doubt of the syphilitic nature of the disease.

DR. ROBINSON does not see any proper lesions of lichen planus in the case. He had seen before similar grouping of papules on the arms in syphilis, spreading at the periphery. The nodules in this case are more gummatous in character, and decidedly lack the firmness of tissue met with in lichen planus.

DR. FOX remarked that in daylight the color of the papules was more bright than is generally found in syphilis; the papules on the neck certainly showed much of the appearance of those of lichen planus. He wanted to emphasize the fact that even in papular eczema, papules with a hard, smooth, shiny surface may be observed. He did not consider the occurrence of groups of nodules around a pigmented center common in lichen planus. As to the age of syphilis, he agreed with Dr. Lustgarten that it would not be later than six months. Possibly Dr. Cutler's view, that both diseases were present, was correct. He hopes to present the case later on, after submitting her to specific treatment, without any local remedies.

Case for Diagnosis.¹—Presented by DR. MORROW.

DR. LUSTGARTEN thought it a case of xanthoma tuberosum. He observed two cases of more general distribution, where the nodules were grouped similarly to psoriasis on the body and face, and very numerous on the dorsal surfaces of hands and fingers. Both the patients had had chronic icterus, and in one of them tumors of the liver could be ascertained by the clinical examination. He believes that the microscopical examination to be made by Dr. Fordyce will bear out his opinion.

DR. ALLEN said that the color certainly suggested xanthoma. The diagnosis might have to be made by exclusion. Upon the appearance of the lesions about the knees he principally founded his opinion.

DR. SHERWELL thought decidedly that the case was one of xanthoma tuberosum in very unusual location. What had interested him deeply in the case was the successful therapy of Dr. Morrow with the salicylic plaster, this appearing to have loosened and separated the contiguous connective tissue from the nodules, so that they could and had been removed in great part by the doctor. He would await results of microscopical examination with great interest.

DR. FOX agreed with the diagnosis. In a case of Dr. Jackson's he had seen the soles the seat of xanthoma.

¹ See page 1, January Number.

DR. LUSTGARTEN, too, saw in two cases a number of lesions on the soles and in other parts of the feet exposed to pressure, which seemed to be favorite spots.

DR. SHERWELL had seen a case in which the nodules, though not present on the feet, had analogous or corresponding location on the hands, the palmar surfaces, tips and sides of fingers. The same patient had also marked lesions on knees, elbows and buttocks ; none on the face.

DR. JACKSON considered the case one of xanthoma, though it did not look much like the one he had reported not long ago. The lesions in that case were not so hard as in this. In his case there were some xanthomatous patches along the borders of the feet, but none on the feet.

DR. ROBINSON'S diagnosis was xanthoma tuberosum.

DR. MORROW: His first impression had been that it was a case of xanthoma ; however, he has never seen xanthoma with such hard, shot-like lesions, of globular shape and so deeply implanted. He stated, what could not be seen so well by artificial light, that the tumors have an angiomatous character, enlarged capillaries being visible on the summit, giving them a decidedly pinkish tinge, which disappears on pressure, revealing a yellowish waxy appearance. The behavior under salicylic plaster does not bear out the view of this xanthomatous nature ; the epidermis softened and came off, then the nodules could be dug out, leaving depressions similar to those under the crusts of lupus. Some of these pit-like depressions were quite visible to-night.

He had not been able to study the case satisfactorily from lack of time. He doubts the correctness of the diagnosis of xanthoma, and hopes to receive information from the microscopical examination.

He finally called attention to several symptoms which were present in the case : intense local pain preceding the eruption, pains disturbing sleep even now, heavy feeling in the legs, particularly in the morning.

Case of Acne Varioliformis (Hebra).—DR. ALLEN brought before the Society the same patient he had shown at the 211th meeting, who had presented himself again on October 18th with a history of the eruption having appeared two weeks ago. There had, however, been one slight attack during the summer which the patient cured with the ointment left over from the first attack. The lesions are now especially large, some having a diameter of a centimeter or more.

The crater-like lesions now occupy both sides of the face and temples, chin and scalp, while just below the clavicle on the left side, two well-marked lesions are seen, indicating the possibility of extension to all portions of the surface. Such extension is, however, rare. Indeed, it is common to see the lesions upon the face and none upon the scalp. In former attacks in the present case the scalp has escaped. The speaker was strongly of the opinion that the disease is parasitic, and not constitutional, as some have thought, and is spread to neighboring parts by direct transfer of the parasite. This would account for the lesions in this case upon the upper portion of the chest.

As to the name, he only favors its retention till a better one is found. As the affection does not seem to be connected with the sebaceous glands, it would probably be better not to call it an acne. As to the qualifying "varioliformis," the lesions, as well as the pittings left by them, certainly

bear some resemblance to those of variola. Still, perhaps such a term as perifolliculitis crateriformis might be preferable, but so long as the present name suggests the disease which is meant, we can retain it at least until the true pathology and etiology are determined.

As to treatment, nothing has given such good results in the half dozen cases the speaker had treated, as ammoniated mercurial ointment. This had removed all the lesions in about ten days in this case a year ago. In the present attack resorcin was tried at first, but it seemed rather to aggravate the surrounding inflammatory action.

Three days ago he began with ammoniated mercury on the left side of the face. This side now seems to be somewhat better than the other parts on which resorcin has continued to be used.

DR. CUTLER remembered the case very well, and agreed with the diagnosis.

DR. FORDYCE and DR. LUSTGARTEN likewise agreed with the diagnosis.

DR. SHERWELL remembered having seen the case when shown before; he had presented a similar case on the same night. The French authorities, notably Quinquaud and Brocq, had recommended the same therapy as that employed by Dr. Allen. Folliculitis decalvans he thought about as good a name as any for the affection.

DR. ALLEN solicited expressions of opinion as to the name and etiology of the disease.

DR. WEISSE was interested in the treatment, and inquired for the strength of the local application.

DR. ALLEN was anxious to see bacteriological examinations made. The best treatment was that by ammoniated mercury; it gave the best results, but did not prevent relapses. He thinks that the disease formerly seemed to be more rare in this country.

DR. FOX said that the remedy had failed to give satisfaction in a number of cases, and inquired whether other remedies had proved effective in the hands of other members of the Society.

DR. KLOTZ saw good results from an ointment of about 2 per cent. of betanaphthol, 10 per cent. sulphur and oxide of zinc, which he had once before recommended for sycosis.

DR. LUSTGARTEN saw good effects of a 10 per cent. resorcin salve.

Presentation of Photo-Micrographs.—DR. FORDYCE presented a series of photo-micrographs of benign epithelioma from the case presented at the 218th meeting. Some of them showed distinctly the histological appearance of true epithelioma.

DR. FORDYCE also showed photo-micrographs from a syphilitic kidney. On some the thickening of Bowman's capsule could be seen; on others a hyaline degeneration of the glomerulus.

Hair from the Axilla, Resembling Piedra.—DR. KLOTZ presented hair from the axilla of a man who was treated for some other skin disease. A number of hairs appeared of red color, and incrustated by an almost continuous sheath of nodules. These masses do not enter the hair itself, which, however, shows the condition of trichorrhesis nodosa, *i. e.*, spindle-formed thickening in the continuity and splitting with tendency to break. Some spots have the appearance of two paint brushes pushed against each other;

the free end is split into a number of shreds. Under the microscope the nodes appear as greenish-yellow conglomerates, with rounded sharp outlines and finely radiated structure. The nodes surround the hair like fungus growth the trunks of trees.

Not having been able to find anything in the text-books on this condition, which he had seen once or twice before, he would be glad to receive any information on the cause and frequency of the affection, which seemed to be caused by a fungus.

DR. SHERWELL considered the incrustation as due to deposit of solid matter from sweat; the peculiar beaded appearance might be caused by lapping and more or less attrition of hairs upon one another.

DR. ALLEN had seen such hairs several times, especially in summer. In one case perfectly black hair appeared bright red from a deposit which he took to be a fungus growth.

DR. FOX asked whether the nodules were covering the hair in its continuity or left free intervals?

DR. KLOTZ stated that those hairs which he had examined showed a continuous covering varying in thickness.

DR. JACKSON stated that the appearance was due to a fungus. Similar cases were not infrequent in localities exposed to sweat, especially the axillæ. Sometimes the undershirts would be stained red, and patients would thereby have their attention directed to it. Maceration by the sweat accounted for the splitting of the hair, and in the roughened epidermis the fungus gained lodgment.

Report on the Effects of Thilandin and Tumenol.—DR. FOX made a short report, stating that he had used thilandin strictly according to the recommendations of Saalfeld, who reported excellent results. He found it of no value whatever, except in lupus erythematosus, where it seemed sufficiently effective to justify him to recommend it for a more general trial.

Tumenol he used in acute and chronic, more infiltrated eczema, with the most satisfactory results; good effects were observed also in psoriasis. It allays at once the itching in eczema. On infiltration, it seems to act like tar without the irritating qualities. In a case of syphilis it had no influence on the itching. Tumenol is a hard, resinous, bituminous substance, soluble in ether and somewhat in hot water; the best preparation was an oil, which could be used pure or mixed into an ointment, or the substance itself is softened by heat and then mixed with ointments. Like ichthyol, it can be easily washed off with water and soap.

In answer to Dr. Cutler's inquiry about the price, Dr. Fox stated that tumenol was quite expensive, but it was needed only in small quantity.

DR. ALLEN thought, as tumenol was soluble in ether, it would make a good preparation with collodion.

Report on a Case of Lupus.—DR. ALLEN stated that he had expected a case of lupus, formerly shown before the Society, which was now apparently well, after scarification, presenting soft scars upon both cheeks and upper lip.

Book Reviews.

A Treatise on Diseases of the Rectum and Anus. By JOSEPH M. MATHEWS, M.D., Professor of the Principles and Practice of Medicine, and Clinical Lecturer on Diseases of the Rectum, Kentucky School of Medicine, etc., etc. New York: D. Appleton & Co., 1892.

The elevation of the diseases which form the subject of this work to the rank of a distinct specialty has been legitimized in this country at least by the establishment of special Professorships and Lectureships on "Diseases of the Rectum" in various medical institutions of learning. This action has been due, doubtless, to the growing interest on the part of the profession in this large and clinically important class of affections, and to the recognition of the fact that their proper and successful treatment requires a knowledge and skill to be derived only by special study and training.

This book was written, as the author states in his preface, because of a desire to record his individual experience of fifteen years as a rectal specialist in answer to the demands of his students and friends. That the results of this experience do not always coincide with the views held by other authorities shows that there is room for an honest difference of opinion respecting many important points connected with the pathology and treatment of rectal diseases.

In the work before us the author has introduced much new material not found in other text books on Diseases of the Rectum and Anus such as: Disease in the Sigmoid Flexure, the Hysterical or Nervous Rectum, Anatomy of the Rectum in Relation to the Reflexes, Antiseptics in Rectal Surgery, New Operation for Fistula in Ano, etc., all of which will be found suggestive and of great practical importance.

The book is embellished by several chromo-lithographs and numerous illustrations showing the instruments required and the method of performing the various operations described in the text.

Manual of Practical Medical and Physiological Chemistry. By CHARLES E. PELLEW, E. M., Demonstrator of Physics and Chemistry in the College of Physicians and Surgeons, New York. 8vo. pp. 314. New York: D. Appleton & Co., 1892.

The author having found upon investigation that the chemical courses in medical colleges were not sufficiently practical for students studying to be physicians, prepared, with the assistance of Prof. Chandler, a course of thirty lessons, in which the subjects and tests had a practical bearing on the students' other work.

The present work contains these lessons revised and amplified; it treats of the following subjects:

Carbohydrates, the fats and fixed oils, the proteids of albuminous bodies, the inorganic constituents of the body, water analysis, animal tissues and secretions, the digestion and the urine, together with the microscopical examinations of the same.

The work, which is prepared after an original and commendable plan, cannot fail to become at once a standard book, and to be of use not only to

the student of medicine, but as an excellent work of reference for the practitioner. Particular attention has been paid to the latest clinical tests for food stuffs, water, and the fluids and tissues of the body. The illustrations used to elucidate the text are excellent, and the work is superior in its paper and typography to most of the medical text-books in use.

Cancer and Its Treatment. By DANIEL LEWIS, A.M., M.D., Ph.D. With two color plates and two woodcuts. Detroit, Geo. S. Davis, pp. 127.

This little book, which is one of the fifth series of the Physicians' Leisure Library, is worthy of a place along side of the many excellent monographs of the series that have preceded it. Its author has won for himself an enviable reputation in the treatment of the various forms of Cancer, and now presents in a clear and forcible manner the essentials of the diagnosis, etiology, and treatment of the disease.

No attempt is made at the production of an exhaustive treatise on the subject.

The limits imposed by the publisher forbid that. Still in its pages we find enough to satisfy anyone but a special student. The term cancer is used by our author to indicate all malignant neoplasms, whether of the epitheliomatous, sarcomatous or scirrhus variety. The various non-malignant diseases of the skin from which cancer may develop are well presented, such as warts, moles, and sebaceous tumors. There are sections on Paget's disease of the nipple; epithelioma of the skin, and tongue; scirrhus of the breast; cancer of the uterus and rectum; and sarcoma of the scalp. He has drawn his conclusions largely from his own experience in 534 cases, and they are important. He holds that cancer is a local disease and not amenable to internal treatment, though chian turpentine and chloride of aniline influenced some cases favorably. He seems to prefer escharotics to the knife in the majority of cases of cutaneous cancer. Full directions are given as to the preparation and application of caustic pastes and the minutiae of operations by excision are detailed. We commend the book most heartily, the more especially as such contributions to our knowledge are rare, and this one is easily read and very practical.

Genito-Urinary and Venereal Diseases. A manual for students and practitioners. By CHARLES H. CHETWOOD, M.D., Visiting Surgeon Demilt Dispensary, Department of Surgery and Genito-Urinary Diseases, New York. Philadelphia: Lea Brothers & Co.

This work, prepared as a "Quiz Compend," treats of the subjects indicated by its title in the form of questions and answers. The therapeutic methods and recommendations are largely those of Dr. E. L. Keyes, to whom, and to others, due credit is given by the writer.

Such books as the present serve a useful purpose, not only to the student preparing for examination but to the practitioner, in recalling the more salient characteristics of the affections under consideration.

Les Vices de Conformation des Organes Génitaux et Urinaires de la Femme.

Par CH. DEBIERRE, Professeur d'anatomie à la Faculté de médecine de Lille, avec eighty-six figures dans le texte, pp. 351. Paris: J. B. Ballière et Fils, 1892.

The author has devoted a chapter of his interesting work to the anatomy of the female genital organs: the ovaries, the fallopian tubes, the uterus, the vagina, the hymen, and the blood vessels and nerves of the internal genitals,

the vulva and the mammary glands. The second chapter treats of the development of these organs. In the third and by far the most important chapter, the various malformations and anomalies of the internal and external genitals together with hermaphroditism are reviewed.

The Physicians' Visiting List for 1893. Forty-second year of its publication. Philadelphia: P. Blakiston, Son & Co.

Each year the publishers of this excellent visiting list add new features which enhance its usefulness. We notice among the additions for 1893 a list of new remedies, a short account of disinfectants, notes on the examination of urine, the diagnosis and treatment of the simpler superficial diseases of the eye, and some notes on local therapeutics.

Items.

NOTES ON SYPHILIS.

Acute Yellow Atrophy of the Liver is thought by Reimers to be the result of syphilis. In three cases where the symptoms appeared about seven months after the chancre the diagnosis was confirmed post mortem.

Breach of Promise Suits can be successfully defended in Kentucky and North Carolina on the plea of syphilis.

Fibroid Tumors, as well as metritis and endometritis, are occasionally the result of syphilis, according to Prochownick, who found iodides and mercury to give relief in certain cases, and to be followed by distinct decrease in the size of the tumor.

Hydrocephalus is not infrequently noted in connection with hereditary syphilis. Heller says the latter should always be borne in mind in chronic enlargement of the head. He has seen recovery under iodide in an infant of a few months.

Hypertrophic Osteo-Arthropathy seems to be a possibility in syphilis when the virus acts upon the tissues in somewhat the same way that the toxins of bronchiectasis and empyema do. In Schmidt's case (*Munch. med. Woch.* No. 36, 1892), there were bulbous enlargements of the terminal phalanges of the fingers and toes. There was also pain and swelling at the wrist and elbow joints. Mobility was restored and pain disappeared under iodide.

Rachitis, according to Jaeger's view, is not so directly the result of hereditary syphilis as it is an indirect effect of weakness of the body and constitution resulting from the syphilis. In fifty-three hereditary syphilitic children, treated and discharged as cured, eleven subsequently developed rachitis, while eight children of those same syphilitic parents having shown no signs of syphilis, likewise became rachitic. The weakening of the bony system is thought to pave the way for the rachitis.

General Paralysis when conjugal, or appearing in husband and wife, is, according to Régis (*Archiv. Clin. de Bordeaux*, No. 7, 1892), the result of reciprocal syphilization. Statistics show that syphilis is extremely frequent in

the antecedents of subjects of general paralysis, while clinical observation shows that syphilis, combined with cerebral predisposition, is responsible for those cases of precocious general paralysis, and multiple general paralysis attacking a series of individuals successively who have contracted their disease from the same source.

The Germ Theory of syphilis, Moulin thinks, offers an explanation for Colles' law, and he has no doubt that the assumption of the formation of some chemical virus, which may either cause the same symptoms (like tetanin, for example), or confer immunity according to the particular conditions under which it is acting, offers the most reasonable explanation for the facts, so far as they are known at present.

Hereditary Syphilis does not invariably diminish in intensity in succeeding offspring, and Ferras says healthy children may be born in the interval between two who are infected. Jullien gives as the result of 206 pregnancies where one or both parents were syphilitic, 162 births at term, 36 abortions and 8 still births, of those born 69 died early, 50 became syphilitic, and only 43 appeared to remain healthy.

Treatment During Pregnancy materially lessens infantile mortality. Etienne (*Ann. de Gynec.*, Apr. 1892) finds that the foetus is most often attacked between the fifth and seventh month. When the mother is infected during the first three months and is not influenced by treatment the child is apt to die soon after birth if not before. In one case where the mother was infected at the eighth month the child apparently healthy at birth subsequently developed syphilis, but the later the mother is infected the better the chances for the child's escape. Active treatment can be carried out in pregnant women without danger.

Thymolo-Salicylate of Mercury is well spoken of by Neumann, as not producing pain or infiltration in hypodermic use, not decomposing, not being difficult to employ, and not requiring over six to ten injections to cause disappearance of symptoms.

An Electrical Bath for the speedy introduction of mercury into the system has been invented by Gärtner and employed by Kronfeld in Vienna with favorable results, and is spoken of as being reliable, rapid and easily applied. Patients thus treated excreted more mercury by the kidneys than when otherwise administered.

Papillomatous Chancre upon the cutaneous surface is a rare form of the primary lesion, and when it does occur its situation is likely to be one near a mucous surface. Such an instance is recorded by Cripps (*Lancet*, April 16, 1892) as occurring between the chin and lower lip of a man cut in being shaved. The lesion was poulticed and this may account for the very unusual form.

Leucoderma Syphiliticum while most usually located upon the sides of the neck in women may occasionally occupy the lateral aspects of the chest, the epigastrium and the thighs, and has been said to occur upon the dorsal aspects of the fingers.

According to Fiveisky neither mercury nor iodide of potassium exert any marked influence on its course or duration, which usually extends over a period of three or four years and sometimes longer.

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THE CUTANEOUS CICATRICES OF SYPHILIS.

BY

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Chicago.

FROM a diagnostic point of view, the value of the recognition of cicatrices upon the bodily surface can readily be appreciated. The evidence thus furnished as to a prior surgical or accidental traumatism, or a previously active tuberculosis, zoster, or other cutaneous malady, may be both instructive and portentous. This is more strikingly true of the cicatrices which are due to a disease which has had not merely a significant past, but may also have a formidable future. Such a disease is syphilis, whose persistent markings of the bodily surface may be of prime importance in determining the exact character of an epileptiform seizure, a pulmonary hæmorrhage, a sudden hemiplegia, or an insidious albuminuria.

With the typical cutaneous cicatrices produced by the degenerations and ulcerations of syphilis, all properly trained physicians are more or less familiar. They have no great difficulty in recognizing by inspection their cyclical outlines, their usually exact definition, their slight depression below the general level of the unaffected tissue about them, their generally superficial location, their freedom from deep attachments, their hue varying from the deepest chocolate to the dead whiteness of other ancient scars, and their smooth, even at times, lustrous surface. Usually, also, it is not very difficult to recognize the combinations formed after multiplication, and what may be

termed coalescence of these typical cicatrices, producing thus outlines suggestive of the figure of eight, the letter "S," the horse-shoe, the kidney, and that arrangement of smaller about arcs of the larger size similar to the devices of the jeweller whose gems are set about a brooch.

It is rather with a view to recognizing the modifications of these type-scars, as they occur in different regions of the body that the present study has been attempted. I beg permission to add that what percentage of errors may be involved in the result may be in part set down to the personal element represented in these observations. It is, on the whole, surprising to note that so few have thus far ventured upon the same ground. The mass of physicians are in the long run content with their results when their patients are at last fit for assignment to that very mutable category loosely termed "the cured."

The cicatrices of syphilis upon the scalp are usually obscure on casual inspection, by reason of the pilary growth with which they are surrounded and which must be removed in order to ensure careful observation. They may be loosely arranged in two groups, the one including the relatively large scars, the other those of smaller size; the former usually single and rarely more than double; the latter often but not necessarily multiple.

The single large scalp cicatrices of syphilis are rare and commonly occupy the greater part of the surface above the calvarium with the center approximately near the vertex. They betray the classical features mentioned above in their circular and oval outline, their superficial character, and their slight depression below the general level of the scalp. Very rarely indeed, however, are they to any degree pigmented, their color, when they are at all colored, being of the deep red empurpled hue of a more or less recent hæmatostasis. As a rule, after even a few weeks of healing, they are of a dirty whitish or grayish hue. They are usually destitute of hairs save that here and there a single filament or a scanty wisp projects from the smooth or scaling plane of the atrophic disk. The greater part or but a small portion of these platter or palm-sized scars may be composite, the elementary contained disk being plainly of the order of the larger and containing circle, viz., a small coin-sized or finger-nail-sized depression within a depression, defined, rounded, and having either a smooth central area or one that is of the sort described above as scaling. This well-known condition in syphilitic scars, suggests the flaking of the

thin scale of mica as that material appears in some articles of manufacture.

Patients exhibiting these large scars have usually been the victims of a long unrecognized, or untreated, or improperly managed lues; and preferring not to wear a toupée have carefully cultivated a long lock of hair growing from one temple which is artistically spread over the deformity. Single large cicatrices of the same order may be seen less often above the temples or near the occiput, or projecting from the scalp surface beyond to brow or nucha.

An exceedingly interesting variation from deformities of this class, often unrecognized in its real character save by experts, is the dumb-bell shaped lesion lying near the upper verge of the brow often centrally situated, with its wings as large as the section of a hen's egg or of a billiard-ball, symmetrically disposed. When this has not succeeded an obvious ulcerative process but a persistent or resolving gummatous infiltration with consequent atrophy, the picture is often quite puzzling. Here and there over the surface may be seen delicate superficial scales of the sort described above, patches of dull hyperæmic redness, a solitary pilary filament obviously poorly nourished and ready to share the fate of its fellows that have fallen, at times even a telangiectasic spot, or even other lesions, pustular and pustulo-crustaceous, almost sufficient to suggest a doubt to the diagnostician.

The rare atrophic conditions of the scalp resulting from obstinate favus are not so often suggested by these patches as are the relics of the large disks left by lupus erythematosus, in the same locality. The latter, however, when attaining the size of the palm or exceeding this, have, as a rule, a free edge bordering upon the so-called non-hairy cutaneous surface, while the syphilitic scars of the scalp of the same size are more often, not always, surrounded by a hairy-rim. Moreover the scars of erythematosus lupus are seen more commonly back of the ear or spreading from the temple or from the occiput. The scalp-cicatrix of lupus erythematosus may be "stippled" or absolutely smooth and hairless; but it never displays within its borders, the "wheel within a wheel" the conglomerate character of the large syphilitic scalp-scar of vertex or brow. It is well also to note that the syphilitic scar which spreads from scalp to face or neck, or from the latter to the former, bears the unmistakable seal of its character in its cutaneous limb, while that of lupus erythematosus as a rule extends smoothly and without

change of feature toward the regions beyond the scalp. Lastly, the scalp-scar of lupus erythematosus is well-nigh invariably associated with typical lupoid cicatrices of the bridge or alæ of the nose, of the temple, of the concha of the ear, or over the jaw, while the scalp-scar of syphilis may be the sole stigma of the disease upon the surface of the body.

The smaller cicatrices of syphilis upon the scalp may be single but are usually multiple, rarely exceeding six to ten in number. They vary in size from a split pea to a finger-nail, and are probably in numerical proportion to the lesions just described as the deep pustulo-crustaceous lesions of ecthymatous grade from which they generally take their origin, stand to the rarer gummata of the scalp. On account of the fact that they are usually hidden from the eye of the observer by long hairs of the scalp and are thus much less readily scrutinized than the large scars already described, the attention of the physician is rarely attracted to them after cicatrization is completed.

Indeed they are most often encountered when in a state of partial repair. A defined, tender, empurpled, sunken and smooth plaque of semilunar outline is then discovered whose projected circle is rounded out by a shallow clean cut ulcer with or without a crust. I have seen a physician triumphantly point to his demonstration of the parasitic nature of this patch of disease by exhibiting under the microscope as the spores of the trichophyton, globules of fat, the residua of an ointment applied for relief of the affection.

No one can mistake the scars of zoster produced by involvement of the supraorbital nerve and limited to one side of the scalp or bald head, for these fewer and better rounded cicatrices. When those of syphilis are both small and grouped, the peculiar "worm-eaten" look of the patch, due to the small size of the elementary scars is highly characteristic, especially when studied upon the temple thinly covered with fine hair. The cicatrices of a traumatic origin upon the scalp are usually linear and very often display a ridge of cicatricial keloid, delicate but distinct, running along the axis of the lesion.

Some confusion exists at present with respect to the question of certain groups of morbid symptoms with cicatricial or pseudo-cicatricial sequelæ in the scalp, which in France and elsewhere have been given names indicating a belief in the existence in this region of as many separate diseases. Nor have the discovery, successful cultivation, and inoculation of cultures of micro-organisms in some of these conditions, sufficed

to clear up the confusion which they have begotten, or even largely contributed to our knowledge of their identity.

Quinquaud's "Epilating folliculitis decalvans"¹; Brocq's "Folliculitis and Peri-folliculitis decalvans"²; in both disseminated and agminate forms; Besnier's "Unnamed Cicatricial Alopecias"; Boeck's "necrotic" and yet other forms of rare "acne" such as Robert's "acne decalvans," the "dermatitis papillaris capillitii" of Kaposi, the forms described as "lupoid sycosis," "pseudo-pelade," and odd varieties of keratosis to be found in some of the text-books, may all be cited in this connection. No one is justified as yet in dogmatizing on the subject of the several symptoms indicated by this group of names, and yet a careful study of the descriptions given by the authors who have coined them, leads, perforce, to some conclusions in the mind of an unprejudiced observer of experience. That some of these conditions are of syphilitic origin, there can scarcely be a doubt. The brightest of intellects in science have been deceived again and again by the innocent appearance of a syphiloderm. We may even affirm that there is no expert who may not be deceived at times in the determination of the character of a single lesion, when it alone, for the time being, represents on the bodily surface the general process of infection. A careful study of half a hundred typical scalp-cicatrices, in cases where there is no possible doubt as to the nature of the general process (for example, as in some of the observations made the basis of this paper where coincident periostites, and ulcerating gummata rendered the diagnosis of the malady certain) at once reveals the fact that most if not all of the symptoms which Messrs. Besnier, Boeck, Quinquaud, and others describe as characteristic of other maladies of the scalp, are certainly present in some forms of scalp atrophy due to syphilitic changes. Here, as well as there, can be recognized, smooth, slightly depressed, atrophic disks, at one time of a dull reddish hue, at another dead-white in color, with sparse wisps of hairs firmly attached, disposed in islets or irregular promontories; occasional puncta of vesiculation or vesico-pustulation; and even elevated points, firm ridges, or nodules where no microscope can detect the spores or mycelia of a vegetable fungus.

Other of these cases, I venture to suggest, without great fear of contradiction, are instances either of lupus erythematosus of the scalp or of tuberculosis of that region (e. g., the unnamed

¹ Bull. de la Société Méd. des Hôpit., Août, 1888.

² Traité des Malad. de la Peau, Paris, 1892.

cicatricial alopecias, the scalp kerotoses, the acne decalvans, etc.). It is to be noted that most of the authors cited are not careful to set aside, in the matter of diagnosis, lupus erythematosus or tuberculosis of the scalp. Who has yet given us an exact and careful picture for example of the cicatrices of lupus erythematosus as it invades the pilary regions of the body? I have certainly in more than one instance studied with care the cicatrix of a smooth area of the scalp, hairless, with but a few filaments appearing at odd points, where the face was covered with typical scars of lupus erythematosus and asked myself with a serious doubt whether it were possible for one to accurately recognize the character of the scalp lesion if the others were not apparent to indicate the diagnosis.

Others, we must admit to be instances of encroachment within the follicle and to the perifollicular tissue of the staphylococci which preside over pus formation. At times the bacilli of tuberculosis may be found in the minute tubercles and purulent foci of more than one of the conditions here enumerated. But without transgressing further the limits set by the title of this paper, enough has been said at least to call attention to the striking fact, a fact no diagnostician can afford to ignore, that as regards the multiple agminate or isolated cicatrices to be recognized upon the scalp, syphilis can and continually does produce these without the occurrence of other cutaneous manifestations of the disease; and cunningly reproduces, in most, the appearances and symptoms described by authors in connection with other diseases. It is safe at least to differentiate with the utmost care all possibilities of luetic and tuberculous infection before establishing another diagnosis.

The syphilitic cicatrices of the face may be considered in three categories: first, the larger, few or single and asymmetrical; second, those which are small, few, and also, as a rule, asymmetrical; third, those which are numerous, small, and symmetrical. These are named nearly in the order of frequency of occurrence.

In the first and second classes may be included the scars fairly classical as to type, occupying one side of the brow, near the scalp; those of exceedingly irregular outline with jagged edges found on one side of the root of the nose; and those occasionally seen on one cheek, the temple, and just below the ear. The irregular outlines of those near the nose are due in part to the anatomical conformation of the region involved and in part to the movements of the facial organs. The contrast is distinct

between these and their smoother fellows on the plain surface of the brow above. An odd-looking scar of this region is set at about one-half an inch distance from one angle of the mouth, semi-lunar and deeply depressed, with the convex border turned toward the ear, one horn at times encroaching upon the upper or lower lip. Syphilitic scars upon the center of either upper or lower lip, unaccompanied by others elsewhere, may be named as among the very rare and exceptional lesions of the face.

The more common and yet rare linear scars of the mouth-angles deserve a passing notice. If I am not greatly in error, their like is never seen in the non-infected. They resemble the puckerings of the mouth in the case of the infant with inherited disease. As a rule they are linear, radiating in a roughly stellate fashion away from the long axis of the oral orifice; and may be symmetrical or the reverse. They commonly persist through life, and are at times so delicate that close inspection is required for their identification. They result from ulcerating muco-cutaneous syphilodermata, quasi-mucous patches, reluctant to heal on account of the mobility of the organ involved.

The third group includes an interesting and significant class of lesions, usually originating in a copious crop of resolving or ulcerating tubercles. Here the skin of the entire face may be symmetrically involved, or, what is more often noted, the upper segment only. The scars are numerous, flattened, closely set, defined, and very superficial, being remarkably smoothed away a few months after repair has been completed. Still, I have examined and recognized with ease traces of these scars five years after the patient passed from under observation. They in no case suggest the indentations of the skin of the face succeeding a severe variola, never exhibiting the quasi-polygonal outline of the latter nor their relative depth, neither do they, save in the most exaggerated cases, involve as does variola, the entire facial surface. They could never be mistaken by an expert for the asymmetrical cicatrices of a facial zoster involving the fifth nerve; even the rare double facial zoster with involvement of the fifth are readily excluded in making a diagnosis. When they traverse the bridge and sides of the nose they are highly suggestive of the scar-like sequelæ of certain forms of atrophic acne of the same part. When limited to the nasal region the differential diagnosis is not made without difficulty. Often a clue is furnished by unmistakable relics of the ancient acne upon the dorsum of the chest, for, as a rule, it is only the grave and rebellious forms of acne that leave scars in this region of the

face. Varioliform acne rarely leaves nasal scars. Linear, usually vertical, scars due to syphilis occur rarely upon the brow or elsewhere. I believe they are usually due to accidental causes, picking and scratching the smaller lesions, cauterization, and downward drop of a caustic employed.

Upon the several regions of the neck, the trunk, and the hips, typical cicatrices due to syphilis occur in nearly the following order as to location; above and below the clavicles, near the acromial extremity, over the scapular regions and the sternum, and upon the inferior segment of the abdomen and the lumbar region. They are more rarely seen in the axillæ, about the iliac crests, and in the ano-genital region. In that last named, scars are more often due to venereal lesions of non-syphilitic origin, and the same may be said of the large majority of scars implicating the groins.

It is now well known that in both sexes and in the enormous mass of patients, chancre of the ano-genital region, precisely as in the case of extra-genital chancres, leave no scars after healing. The cicatrices which are in rare instances left as sequelæ of these scleroses, result usually from irritative or traumatic accidents. An exception, apparent but not real, for it is due to the causes suggested, is the chancre seated at the meatus urinaris of the male subject. Here the sclerotic process invades the mucous and submucous tissue to a depth beyond the delicate urethral lips, and the result is an induration which can be recognized with ease when the tip of the glans is manipulated between finger and thumb. It suggests that a foreign body from five to fifteen millimetres in length, and of the general size and shape of a section of the stem of a common clay pipe, had been let into the urethral channel. The chancre thus situated is irritated with every evacuation of the bladder by the fluid which traverses it, highly charged with the urinary salts. The result is usually ulceration and, after healing, the apex of the cone of the glans is seen to be truncated, the urethral lips no longer falling easily into perfect apposition. It thus happens that a real urethral orifice forms, a condition never observed in the normal subject, where merely the edges of a closed valve are exposed to the eye; and the characteristic "reamed out" scar is left as pre-eminently the persistent scar of so-called primary syphilis. The other exceptions to the rule in this region are never of the type studied above. They are for the most part jagged indentations of the tissue of the corona or sulcus. Perfectly typical cicatrices of syphilis are occasionally

visible over the skin of the body of the penis and of the scrotum but as a rule, are found only where the rest of the body is extensively marked by the disease.

In women the type-scar of the meatus chancre is very rarely seen, due chiefly to the fact that in that sex the external urethral slit is less often the seat of an initial sclerosis. Relatively large, disfiguring, and irregularly mutilating scars of this region in women, like the stellate anal cicatrices of both sexes, can usually be traced to venereal but non-syphilitic sores of the part. The somewhat rare, smooth, egg-sized and larger, superficial and definitely rounded cicatrices lying just above the pubes and often invading to a degree its pilary tract, are as often the results of lupus erythematosus as of syphilis.

As contrasted with scars of the regions above enumerated, those of the extremities conform most strictly and uniformly to the type here set down as classical. This is largely due to the smoothness of the affected surfaces, not elevated, depressed, and moulded around mucous orifices as in the face and pro-genital region.

Glancing at the upper and lower extremities together, we find a decided predominance of scars in the lower, due to the continued observance of the erect posture for hours at a time; a marked tendency to spare the hands and feet as distinguished from the arms, fore-arms, thighs, and legs; a greater tendency to the clustering of scars about the elbows than about the knees, due to the effects of pressure in the trades; a preponderance of lesions upon the leg, as contrasted with the thigh; an equal participation of arm and fore-arm in the ravages of the disease; a larger number of lesions upon the anterior as distinguished from the posterior faces of the legs, and the external as distinguished from the internal faces of the arms. The rarity of syphilitic scars upon the palms, soles, fingers, and toes, even though, as is not rare, the neighboring wrists and inner aspects of the ankles be involved, is a conspicuous fact. This presents a singular contrast with the very marked tendency of syphilis to exhibit palmar and plantar lesions of erythematous, squamous, and papular type. Here we can merely formulate the result in the statement, that while the exanthemata of syphilis appear to select the denser tissue of palm and sole for their evolution, this very thickness and solidity of structure serve as a barrier against the destructive processes that succeed. Syphilitic scars of the hands and feet are rarely symmetrical, affect the hands more often than the feet, and are found as a

rule more distinctly outlined upon the dorsum of the hand thence spreading over the hypothenar eminence, rather than in the center of the palmar area.

Syphilitic scars of the extremities may be symmetrical and involve all four limbs, in which case the larger and more formidable are about equally divided between them; or asymmetrical and limited to one or any two of the members. It is scarcely needful to add that the type-scar of syphilis of the extremities is displayed upon one or both legs, as delicate, superficial, non-attached, circular plaques, losing pigment slowly in the course of months or years, the result of gummatous ulceration involving the anterior face of the limb, usually somewhat to one side of the tibial crest. The much rarer, irregular, and formidable cicatrix of the lower limbs, due to syphilis, is the result of what has been called by Keyes, "syphilitic housemaid's knee," the ulceration at times opening up the patellar and tibial bursæ, spreading over the knee in circles of encroachment upward and downward, even threatening the integrity of the tendons beneath. The resulting scars are jagged, irregular, and often hedged with ridges of dislocated normal tissue, but when carefully studied they display the exact characteristics of the syphilitic scar. They are often interpreted, by those who are inexpert in the solution of these problems, as the results of lupus.

Every practitioner is at times confronted with the question whether scars of the lower extremities, especially those spread over the anterior faces of the legs, are of syphilitic origin, or due to the common forms of engorgement and ulceration, not rarely associated with an obstinate eczema, indirectly caused by varicose veins of the part. In cases it is really difficult to decide between the two, but usually one may, on close inspection, discover finger-nail-sized circular and superficial, or even larger scars of characteristic syphilitic appearance, at one point or another of the large area distorted with cicatrization and discolored with pigment. The larger, very formidable, irregular, and deeply and extensively pigmented patches are usually not syphilitic, but due to the vascular mischief. The existence of ribbed, corded, seamed, or puckered patches, with remnants of varices in the neighborhood, is always significant of the latter.

In most of the doubtful cases the key to the diagnosis is to be sought not so much in the pigment that actually is present, as in that which has been. In a male subject of average weight and size, a wholly decolorized syphilitic scar of the leg, the decolorization process being just completed, points backward to an

infection from four to eight years before, and a healing of the precedent ulcer between two and four years previously. It is probable, though not certain, that the decolorization is completed somewhat sooner in persons of a blonde type, and in women, the latter fact due to the less demand made upon their sex in the observance of the erect posture. This slow, inevitable, but steadily progressive clearing up of the color, is characteristic of the syphilitic leg, while the steady continuance, for long periods of time, of the vascular disturbance which lies at the root of the eczemato-varicose extremity, produces the final picture of deep inky-black or chocolate-tinted pigmentation, spreading over the half or more of the limb, and presenting, after years of trouble, no such amelioration of symptoms as in the infectious disease.

AN UNUSUAL CASE OF SYPHILIS.

BY

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IN April 1891, Mr. K., aged 45 came to see me from St. Louis, having been advised to put himself in my hands while in Baltimore, by Dr. Hardaway. Dr. H. gave him a letter which read as follows: "Sometime in the Fall Mr. K. went to the Hot Springs, Arkansas, for what was supposed to be syphilis, but the symptoms were ill-defined. He was not under my care at that time. While at the Springs he was put on large doses of iodide of potash in addition to mercurial inunctions. At this time he developed the ulcers which he now has. When he came to me (February 25th), after his return, he was still suffering from the ulcers. They were suggestive to me of iodism, but to satisfy my conscience in the matter I gave him small doses of protoiodide of mercury with tonics.

"Locally all manner of treatment was tried in vain. Naturally iodoform was applied first, but it caused great irritation as indeed did all other kinds of powders such as aristol, iodoI, etc., etc.

"Lotions and salves in great variety were also prescribed but none seemed to suit. Free suppuration and marked pain were the characteristic symptoms. Several ulcers healed, to break down again. I again tried iodide of potash (3-5 gr., t. i. d.), but it developed apparently new lesions and certainly had an ill

effect upon the old ones. Pyoktanin was and is the only remedy that appears beneficial producing anæsthesia and limiting the suppuration. At this date most of the ulcers are granulating well and appear to be healing."

The ulcers referred to first began to appear at the Hot Springs after a most energetic course of inunctions and large doses of iodide of potash. The patient said he had been advised to go to the Springs by a physician because he was suffering from a chronic sore throat which local applications did not relieve. On this account the diagnosis of syphilitic sore throat was made.

His regular occupation was very exposing. He was employed by the Government on the Mississippi River as captain on one of its river boats. From time to time he suffered from attacks of "river fever," but besides them, he had always been healthy. He had knocked about as most young men do and probably had been exposed to syphilitic infection, but as he has now been married for some time, such exposure must have occurred many years ago. He never had a chancre nor any eruption suggesting secondaries. There was no scar of an old sore on the penis nor were the lymphatic glands enlarged.

A well known laryngologist who examined his throat in Baltimore at this time, declared that he could see no evidence of syphilis in it, nothing more than a chronic laryngitis. When I first saw him he had twenty ulcers scattered about the body in the situations which are shown upon this plate. They were deep, sharply outlined ulcerations with a tendency to spread equally in a circle until some of them were as large as the palm of the hand. They began as small hard lumps which could be felt under the skin before they could be seen. Then the skin above the lump became red, the lump grew slowly in size until an ulcer as large as a quarter of a dollar appeared, very deep and circular. This spread to sizes of various proportions until the breaking down process stopped. The photograph which I show taken in St. Louis, gives a very good idea of the ulcerations as they appeared when I first saw them. (See Fig. 1.)

Here then was a case, which, while it had all the appearance of syphilis was only made worse by the usual syphilitic treatment.

The patient after having gone through with so much with no benefit was disheartened, disgusted and desperate.

After Dr. H.'s experience with potash I could not urge him to try it again, in fact, he refused to take either that or mer-

cury. I therefore stopped all internal and depended on local treatment altogether. A saturated solution of pyoktanin in water was applied with a spray apparatus to each of the ulcers and then they were covered with lint spread with an ointment



FIG. 1.

composed of, lanolin $\bar{5}$ I. hydrarg. salicyl. grs. V. The legs and arms were then thoroughly bandaged and left unmolested from two to four days. The ulcers on the other parts of the body were dressed in the same way, and kept as quiet as possible.

When much pus formed peroxide of hydrogen was used with benefit. The patient soon became expert in dressing his ulcers and was encouraged by seeing them gradually close in upon the center. Most of them healed slowly from the first, but I had an opportunity to watch two of the smaller ones on the left foot increase in size, until the thin partition of tissue between them broke down and they formed one large ulcer deep enough to distinguish the working of the tendons of the toe muscles. I saw him for the last time that Summer, July 6, 1891, leaving him in so good a condition, that he said he would go to Saratoga for the waters as they had always been beneficial to his chronic malaria.

On my return in September, I saw him again. All the ulcers had healed excepting one over the left ear. He had had a fairly good Summer, but was now complaining of rheumatism and sore throat. His tongue was covered with whitish looking spots which looked like mucous patches, and his larynx and pharynx were much congested.

He was kind enough to show himself for me in Washington at our last annual meeting and some of you may remember the scars left by the healed ulcers on the arms and legs as well as the patches in the mouth.

I now turned him over again to the same laryngologist who had not before thought that his throat was syphilitic. He found an enormous ulceration of the larynx, one of the largest he had ever seen, which he undoubtedly pronounced to be syphilitic. He suggested the use of Zittmann's decoction and five grains of the iodide of potash ter in die with local applications. This treatment was kept up for several weeks until the patient came to me and positively refused to take any more of the decoction although I believe it was doing him good.

The small doses of potash had a bad effect upon the skin as they were followed by a fresh ulcer on the inside of the left arm above the elbow. He stopped this treatment in May last, when I, after much persuasion, determined to try the hypodermic use of the formamide of mercury as described in my paper of last year. (Fig. 2, shows distribution of lesions and method of employing the injections.) I gave him twenty minims of a one per cent. solution until he had taken five injections. At this time I went to bed myself with typhoid fever and had to put him into the hands of another to make the injections. After taking five more, making ten in all, he again positively refused to go on with the treatment. He had complained so of the pain in

the buttocks that I tried injecting into the muscles of the back instead, but he would not continue them. Meanwhile the patches in his mouth and the ulceration in his larynx had entirely healed so that he was better than he had been for two years.

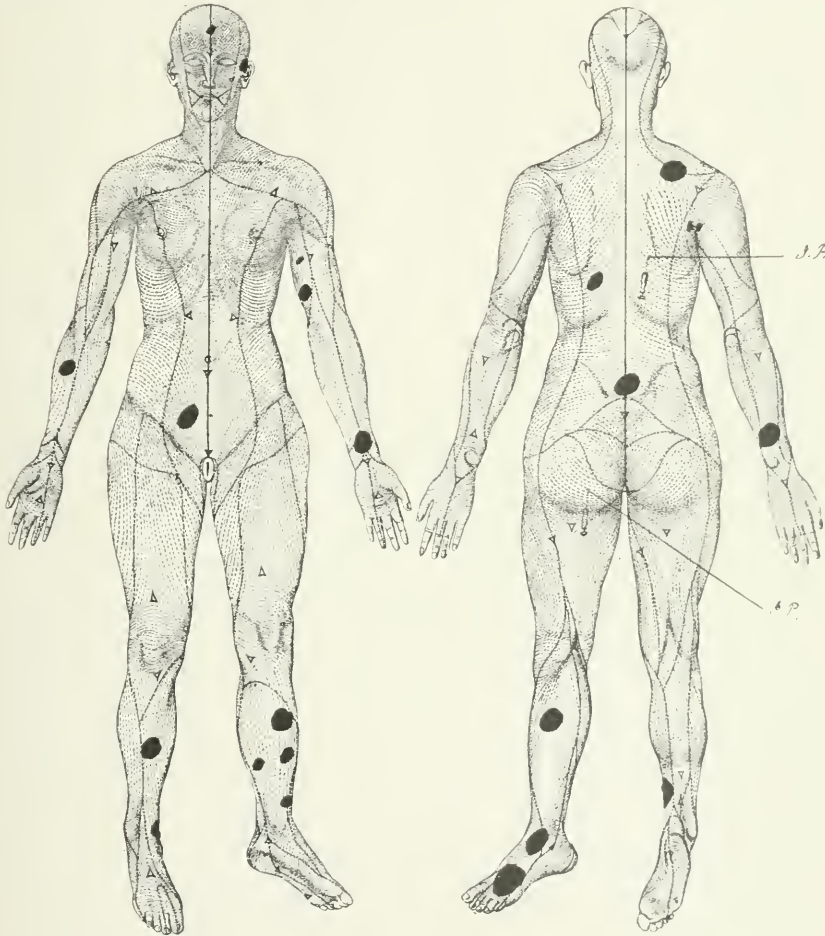


Fig. 2.

I. P. INJECTION POINT, SHOWING POSITION OF SYRINGE AND UPWARD DIRECTION OF NEEDLE.

In June last and while I was still in bed, he wrote me from New York, that his throat was bad again and that some of the places on the skin, where the ulcers had been were inflamed as if they would break down once more. I could not advise him

at that time very well, so I have lost sight of the case, and have not heard anything of him since his last letter.

While Mr. K. was improving under the local application of pyoktanin, I wrote Dr. Hardaway and received the following answer which still further explains his idea of the case. "Your letter in regard to Mr. K.'s case has been received. I am glad to hear that he is getting along so well for he is an excellent and faithful patient. The case is to me one of rare interest and of considerable perplexity. Being fully persuaded that the ulcers were examples of a precocious and malignant syphilitic type, I at once put Mr. K. on specific treatment. The mercury which he took faithfully did him no good and the potash did him much harm. I shall like very much to talk the case over with you when we meet, etc."

Remarks.—The long intercourse I had with the patient convinced me he would have told of any symptom which might have pointed to his having acquired syphilis. Indeed he fully believed he had it himself when he went to the Hot Springs, although at that time he had nothing but a sore throat. This after local treatment was considered syphilitic because it did not get well, so he had nothing else to do than to follow the advice given him. He persistently maintained that it was through the use of infected instruments by which applications had been made to his throat, that he acquired syphilis if he had it. I do not know whether this idea was suggested to him, or was his own. It was impossible however to disabuse him of it.

After a course of treatment at the Hot Springs, the physician in charge of him said there had been a mistake made and that he had better stop trying to cure himself of a disease which he did not have. It was after this that he went to Dr. H. for the first time, who could not believe the trouble to be anything but syphilis. In the face of his trial and failure with potash and mercury, and of his subsequent opinion, I did not feel justified in trying them over again, for I was convinced, and I still hold this opinion, that the ulcerations were the result of too much treatment. He took at one time as much as ninety drops of a saturated solution of iodide of potash, three times a day, besides mercurial inunctions, followed by hot baths three times a week. The gradual healing of the ulcers, without internal treatment was not proof that they were non syphilitic, as reading and experience teach; for syphilitic ulcers will sometimes heal without interference, whether internal or external, but I believe that the ulcers in this case never would have healed if

the potash and mercury had been continued. It was only after a long interval of rest, that the hypodermic use of mercury was tolerated and of benefit.

After the ulceration of the throat and the patches in the mouth appeared, the diagnosis of syphilis could certainly be made, while the healing of these signs following the use of the decoction and the subcutaneous injections proved it more fully.

In conclusion, I would say that in my opinion this is a record of a case of simple syphilis, over-treated in the beginning, which was rendered obscure by a peculiar susceptibility of the system to both potash and mercury.

REPORT OF A CASE OF ACUTE CIRCUMSCRIBED ŒDEMA OF THE SKIN.

BY

CHARLES P. RUSSELL, M. D.,

Utica, N. Y.

NOT many cases of acute circumscribed œdema of the skin have been recorded. This together with the fact that the case I here report illustrates this affection in a very unusual location and had a very peculiar sequel, makes it, I think, worthy of being placed upon record.

Mr. J., aged 16, Irish, occupation helper in a restaurant, consulted me May 3d for what he called a swelling under his left arm. He is a pale, stoop-shouldered lad, with a rather dull, heavy expression and some mental apathy. He says his general health has always been good. Could obtain no history of malaria or rheumatism. Mother dead, cause of death consumption. Father living and health reported good. During the greater part of last winter, the patient suffered from a general pruritis, which came to an end about four weeks before he consulted me. An inspection of the patient stripped shows a generalized pruriginous eruption consisting of torn blood-crusts papules, and pigmentary stains, scattered over the entire body but most profuse over the extensor surfaces of the extremities. There are no wheals visible and no history of urticaria. He says his stomach has never troubled him and that his bowels are regular. Friday, April 29th, four days before I first saw him, he began to feel chilly and languid. He felt so miserable that he gave up work and lay down. Soon after the

onset of these symptoms he noticed a portion of skin just below the lower margin of left axilla begin to swell. He felt no sensation of any kind in it at first. During the next thirty-six hours, the swelling extended gradually without any sensation of any kind save a slight feeling of tension. At the time of first examination, three days afterwards, there was found an ovalish area of œdematous skin and subcutaneous tissue situated upon the left side of the chest occupying a space in the infra-axillary region measuring about six inches in the long diameter by four in the short. The long diameter being vertical to the ribs. The affected skin is swollen, puffy, with a color not much, if any, differing from that of normal integument. Its boundaries are quite sharply defined, not shading off gradually. He does not complain of any heat, burning or itching in or about it, the only thing he does complain of being pain in it when he attempts to raise his arm. On the morning of the day of his first visit to me he felt somewhat feverish and weak and was obliged to lie down and rest, but most of the time he has been up and around. He was prescribed a combination of quin. bisulph. dil. sulphuric acid and ergot, and told to lie down after returning home and rest himself as much as possible. On the 9th, six days after I first saw him, he returned and reported that the swelling of the skin began to leave as rapidly as it came, and on examination at his second visit, I could find no trace of it.

However, I did find a large tense globular swelling in the left axilla, about as large as a goose egg, somewhat tender to pressure and slightly red in the centre. This, according to the patient's account developed rather suddenly, while the cutaneous œdema was in process of involution. The rather rapid formation of this swelling immediately upon the subsidence of one of trophoneurotic origin inclined me to think it one of a similar nature. As the tumor was somewhat painful he was given a muriate of ammonia and laudanum lotion with instructions to keep the swelling wet with it and to return in a day or so for further examination.

He did not report at my office again until five days afterwards, when upon examination there presented an abscess, filling a larger part of the axillary space which was already beginning to discharge itself through two or three small openings. A free incision was made in it under antiseptic precautions, and about a teacupful or more of pus evacuated. The cavity was syringed out and antiseptic dressings applied. He was then

put upon ext. malt with the iodides of iron and manganese. In a few days, up to date of healing of the abscess cavity, there has been no recurrence of the cutaneous œdema. It is interesting in this connection to note the fact that the patient volunteered the statement that a sister of his had recently been in a hospital where, he said, she was treated for lumps on the neck and had a large abscess under the jaw opened. While in the hospital both upper lids and brows began to swell rapidly, one day, and remained swollen for two days, when the swelling went away as rapidly as it came.

There are certain peculiarities in the case here recorded which distinguish it sharply from those reported. These are its occurrence upon the trunk, its existence as a single swelling, the absence of a history of urticaria which is very often associated with cutaneous œdema. The absence of any gastro-intestinal irritation in the prodromal history of the case. Its occurrence in a strumous subject and its apparent close relation to a glandular abscess. Quincke was the first, I think, to describe this peculiar neurosis, to which Jamieson of Edinburgh afterwards gave the description title acute circumscribed cutaneous œdema, which is a very good one for it includes its main clinical features. Quincke's original article is to be found in the *Monatsschrift für praktische Dermatologie* for July, 1882; Jamieson described two striking cases in the *Edinburgh Medical Journal*, June 1889. His cases both occurred in elderly women. In both these cases the face was the region involved. In one the disease first occurred at the climacteric period in association with arthritis and both upper and lower eyelids became quite suddenly the seat of œdematous tumefaction. In the other an entire lip became suddenly swollen and stiff during the night. The œdema subsided in about forty-eight hours and never returned. Dr. G. T. Elliot records a peculiar case of relapsing acute cutaneous œdema in the JOURNAL OF CUTANEOUS AND VENEREAL DISEASES, Vol. 6, p. 19, and in his report refers to a case reported by Dr. Matas of New Orleans, which occurred periodically every day and was completely cured by large doses of quinine. Doubtless other cases have been reported from time to time, in other journals.

The peculiar clinical features of this affection, the suddenly developing œdematous swelling of a comparatively large area of skin, the, in most cases, normal color of the affected surfaces, the comparatively sharp line of demarcation and the absence of marked sensations of itching and burning all so different from

the clinical picture of urticaria, justify us in considering this an independent affection, a morbid entity. The neuro-pathology of this affection, urticaria simplex and urticaria gigans, may be, and probably is, much the same, but, on clinical grounds, we must assign it to its own distinct place in the list of the dermal neuroses.

CONGENITAL SYPHILIS. REPORT OF A CASE.

BY

ROBERT HESSLER, A. B., M. D.

A CASE of congenital syphilis recently occurred at the Indianapolis City Hospital which showed practically no external signs of the disease.

Parental history.—Mother aged 17, white, single, apparently fully developed and in good health, primiparæ, carried to full term. No evidence of any disease. No history or lesion of syphilis in the father.

Labor was slightly difficult, the occiput being posterior. The infant was cyanosed at birth, artificial respiration was resorted to but death occurred one and a half hours after birth. The placenta was unusually large.

Autopsy.—The infant was well formed with regular features, abdomen greatly protuberant. There was a slight vesicular eruption on the back of the hands and feet; vesicles scarcely larger than a pin-head. Length 17.5 inches, weight 5 pounds. The hair and finger-nails were perfect. The face was one of the most perfect and beautiful the writer has ever seen.

Internal organs.—The liver was greatly enlarged, weighing a trifle over eight ounces, or over one-tenth of the entire body weight. It was rather hard and resistant. The surface was smooth and firm. The spleen was slightly enlarged. The lung was firmer than usual, color light red. The other organs seemed to be of normal (infantile) size and structure. The mesenteric lymphatics were rather prominent. There were no nodes in the bones. No enlarged lymphatics could be felt externally. The skull was not opened.

Microscopic examination.—The blood contained an excess of lymphocytes. The case at first sight might be taken for one of leukæmia. The following organs were sectioned, after having been imbedded in paraffin: liver, lung, spleen, kidney,

suprarenals, intestine, mesentery, ecchymosed skin, sternal ends of two ribs and one of the femora.

The liver and lung are the chief seat of the disease, the other organs merely show round cells sparsely and diffusely distributed. The liver throughout is densely crowded with small round cells, between the liver cells and in clusters; bands of fibrous tissue are common. The capsule is not thickened. The blood vessel walls are thickened. The lung shows a similar round cell invasion. Normal alveoli are practically absent; the walls are all more or less thickened. In many places an alveolar structure cannot be distinguished, there is a solid mass of cells. The change is uniform throughout the lung. (It may be mentioned that sections were stained for tubercle bacilli but with negative results.)

This case was of interest to the writer on account of the great increase of leucocytes and the absence of the usual external signs or symptoms of congenital syphilis. The infant was not small and puny and did not have the peculiar aged aspect, the hair was not scanty and the nails were not undeveloped, the skin was not loose and wrinkled, there were no nodes in the bones, there was no pemphigus eruption.

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Correspondence.

DERMATOLOGY AND SYPHILOGRAPHY IN FRANCE.

Clinical, Microscopical and Bacteriological Study of the Trichophytosis of Man.—One of my excellent friends and students, Dr. Sabouraud, who is at the present time assistant of Dr. E. Besnier, at the St. Louis Hospital, has just presented before the Paris Dermatological Society a most interesting communication on human trichophytosis. He first establishes the fact that all the external parasites whose evolution on the human subject produces the affections known under the name of trichophytosis belong to the genus *Botrytis* of the *mucorini* and form a group which could be designated in botany under the name of *Botrytis trichophyton*. Two species of this group are the ordinary causes of human tinea. The first species is characterized by small spores of about $3\ \mu$ in diameter; the mycelium is not visible; the hair is filled with spores which pass outside of its envelope to make an external coating: This trichophyton microsporon probably never invades regions free from hair. It is the form which is the habitual cause of tinea tonsurans of infancy particularly the severe and rebellious forms of tinea.

The second variety is characterized by large spores of seven or eight μ in diameter; the mycelium which unites the spores is always visible; the parasite does not vegetate outside of the hairs nor about it. This trichophyton macrosporon may cause tinea tonsurans of infancy; it is in fact this one which is the cause of a third of the cases (thirty-five per cent.) of tinea tonsurans, but almost always the disease is most benign.

It is this variety of trichophyton which produces trichophytosis of the beard in the adult; it is this one which causes, so to speak, all cases of tinea circinata of the skin: in the scales of this cutaneous trichophytosis the mycelium with mycelial spores is similar to that of the hair although a little less sporulated. Dr. Sabouraud has further isolated and cultivated two other varieties of human trichophyton: 1. A trichophyton with large spores which he has found till now only in the circinate trichophytoses of the skin and whose cultures are of a more vigorous and more rapid growth than those of the ordinary trichophyton macrosporon. Furthermore they show a downy center in cultures.

2. A trichophyton whose spores are large and unequal, and which do not present visible mycelium. He found it once in tinea tonsurans of an infant.

Finally he has been able to isolate two further types of trichophyton which are perhaps parasites of animal tinea having been accidentally cultivated on man: 1. A trichophyton giving black cultures which he found in a trichophytosis of the skin. 2. A trichophyton giving rosy cultures which he found in a trichophytosis of the beard.

The importance of the results already obtained (and Dr. Sabouraud is still carrying on his researches), cannot be denied. Every point has been covered in the work of which we have given a resumé; the clinical characters, the prognosis, the microscopical characters as well as the bacteriological.

This explains why in certain cases we succeed so readily with trichophytosis, and why in others this disease holds on "comme teigne" according to the French saying, and requires for its cure the most complicated and persevering efforts.

Treatment of Tinea Tonsurans.—Dr. d'Andrain has just been experimenting, and with success, in the service of Dr. Du Castle at the St. Louis Hospital the following treatment for tinea tonsurans. He begins by applying repeatedly to the plaques of herpes tonsurans the tincture of iodine. He repeats these applications each day and even twice a day if it is possible, avoiding too great irritation. Every second day the burned layer of epidermis is removed. When under the influence of those successive desquamations the plaques have become smooth and even he proceeds to methodical epilation and scraping after the method of Dr. Quinquaud to remove all the debris of diseased hairs. He then makes intra-dermic injections of corrosive sublimate; directing the needle obliquely so as to form an angle of about thirty degrees with the skin and pushes the hypodermic needle in until in injecting the liquid, it does not appear upon the skin alongside of the needle. The injected fluid spreads out in the derma, and at each point the equivalent of three of the small divisions of a Pravaz syringe inserted. The fluid has the following composition: Corrosive sublimate one centigram tartaric acid forty centigrams, hydrochlorate of cocaine one gram, alcohol and distilled water of each thirty grams. The injections are not very pain

ful, and the author has been able to make as many as fifty at a sitting. They should be very close to each other. If the fluid is injected too deeply one might cause destruction of the hairy papillæ and produce plaques of artificial alopecia. If one injects too much fluid at once sloughs might be produced. The best plan is not to inject more than one drop of the solution at each insertion of the needles. The first days after the injection only a slight swelling is noticed. Twelve days after the injected zones are white, smooth, absolutely bald without stumps or fragments of hair or scales. The hairs grow again very slowly at the injected points, only appearing from three to eight weeks after the injections. Our own experience is nul in intra-dermic injections of sublimate in tinea tonsurans. A priori we should be tempted to find this procedure very difficult to carry out and even dangerous. As to the rest of the treatment repeated applications of tincture of iodine, epilation and raclage we have employed them for a long time but with very variable success which is explained by the researches of Dr. Sabouraud.

The Origin of Favus.—Dr. Basquet has just published in the *Annales de Dermatologie* a memoir in which he recalls the observations of Draper, of Anderson, of Quinke, of the Lyon's school, which prove that the *murides* (rats and mice) furnish the first soil on which grows the still unknown fungus which produces favus. Upon these animals it begins to modify its mycelial characters and to generate the form which in cultures becomes the achorion arloini. From the skin of the mouse which is free from sudoriparous glands and of which the reaction is probably very feebly acid, and where the temperature is but little elevated the achorion passes to the cat, the dog, the rabbit, the ox, the horse, the fowl and to man whose external temperature is more elevated and has a much more acid reaction. In this passage from one animal to another the fungus changes its aspect and after a more or less prolonged sojourn in the new medium living where it finds itself, it takes on a distinct form according to its surroundings. The author publishes a report of this opinion, the case of a young girl of nineteen years, affected with a circinate eruption upon the dorsal aspect of the right hand, upon which he found the achorion arloini—that is to say the achorion of the mouse. This young girl had been contaminated by mice affected by favus which she had touched. The fungus having only been for a short time in process of evolution, her skin had not had time to undergo transformation. All these researches require much further study in order to be definitely admitted.

Diphtheroid Impetiginous Stomatitis.—After Drs. Sevestre and Gaston, Dr. Poulain has taken up the study in an interesting monograph (*Thèse de Paris*), impetiginous stomatitis, or better stomatitis which at times complicates impetigo of the face. This affection appears at first and often in an exclusive manner, the internal aspect of the lips, perhaps also at the same time certain points of the buccal mucous membrane. It gives rise to whitish plaques of diphtheroid appearance. At first one sees appear upon the lips and especially upon the lower lip on a level with the free border, little opaline plaques demi-transparent which, little by little, became more prominent, of a grayish or yellowish white, very adherent to the mucous membrane which bleeds if attempts are made to detach it. The membranes occupy both sides of the median line, and the parts toward the commissures, and usually have an oblong form. From here they may spread over the whole inner surface of

the lips, but they never invade the gums. At times one observes the lesions also upon the velum palati and even upon the uvula. The patches are either rounded or oval. At times they unite at their borders so as to form a plaque with polycyclical outline. They are rare upon the tongue. Here they are small, elongated and occupy the borders in the neighborhood of the joint. Once developed the plaques persist for three, four or five days then seem to diminish in thickness, to contract and disappear by a sort of progressive resorption. In the region of the commissures they may last longer and leave behind a fissure often difficult to heal. On the free border of the lips they give rise to blackish crusts which the children constantly pick off with the fingers or tear off with the teeth, causing the subjacent derma to bleed. They are frequently complicated with painful cracks and chaps. The affected regions are slightly swollen. The ganglia may be enlarged especially in strumous children or those otherwise debilitated, or in those presenting gastro-intestinal troubles. In such children the lesions may last long on account of successive crops. The method of treating this affection varies somewhat according to different authors. Dr. Canby carries out washings with a very weak sublimate solution, then applies on the free borders of the lips a boric acid ointment in 10 per cent. strength, and for the buccal lesions he employs frequent washing with a 5 per cent. solution of chlorate of potassium, or applications of a mouth wash containing in twenty grams of glycerine two grams of borax or chlorate of potash.

Dr. Legroux causes the crusts to fall from the lips by means of applications of poultices of flour and then applies to the whole affected surface with a pencil, a 5 per cent. solution of nitrate of silver. Dr. Sevestre modifies his treatment according to the case, sometimes he prescribes frequent washings with boric acid water and touches the plaques with camphorated naphthol. Sometimes he applies chlorate lotions and dresses them with iodoform. It is necessary to care for the general condition of the infant, to watch over the proper functions of the digestive tube and especially to prevent scratching and thus to guard against spread of the disease by inoculation.

Ulcerating Erythema of the New Born.—It is well known how difficult is the question of infantile eruptions, there is in particular a whole class of erythematous eruptions in infants of a tender age, which furnishes one of the most difficult chapters, for in these cases it is necessary to know in practice if the infant has hereditary syphilis or not, a capital point to determine in view of the danger encountered by a healthy wet nurse. Several works and among others those of Drs. Sevestre and Jacquet have already appeared on this subject in France and now Dr. Callais has made it the subject of study for a Thesis upon the erythemas of the new-born. Among other varieties he gives are of ulcerating erythema frequently seen in infants who already have a diarrhœa and which is consecutive to the reunion at one or more points of numerous vesicles which have ruptured, leaving behind small ulcerations with pinked edges, of a lively red varnished-like and glistening base. These lesions occupy both buttocks on both sides of the anus, on the most prominent points of this region, that is to say, at the points which receive the most friction. They may also be observed upon the thighs, heels, etc., or, in other words, at all points which are subject to any traumatism. They repose on an erythematous base. They have no relation with syphilis. It is not the less true that when one sees these lesions on an

infant whose parents one has not long known in a medical sense, or any papular or slightly ulcerating lesions in this region, especially if there are eruptive elements in the folds or surrounding the natural orifices, syphilis must be suspected, and the child put under observation and such hygienic care and cleanliness employed with boric lotions, zinc oxide or boric ointment, inert powders, soft fine old linen rags, etc.; use as will not interfere with a subsequent definite diagnosis, after therapeutic reaction has shown definitely that syphilis is absolutely foreign to the eruption.

The Microbe of Soft Chancre.—Drs. Quinquaud and Nicolle have succeeded in coloring the microbe of soft chancre by a special method which has appeared to them preferable to those which have been employed till now. It consists in coloring the cuts with a phenicated methyl blue, and dehydrating and clarifying with analine oil mixed with xylol. A bacillus is then seen in bent and twisted chains, very numerous and very long, disposed in the very tissue of the excised chancre. These little cordons occupy the lymphatic spaces outside of the cells. This microbe does not color by the Gram method nor by the ordinary procedure of Kühne. The authors have neither succeeded in cultivating on the most diverse media, nor in inoculating it in guinea pigs, rabbits, or even a monkey. The bacillus appears to them to be identical with that described by Unna.

Treatment of Soft Chancre.—The following is how Dr. Balzer describes his treatment of soft chancre (chaneroid) in his clinic at the Midi Hospital. 1.—The most scrupulous care as to cleanliness, as complete asepsis as possible about the virulent focus, and in this respect the local hot baths recommended by Dr. Aubert cannot be too highly spoken of. These have a temperature of over forty degrees. 2.—After the local bath, caustic application with solutions of chloride of zinc, nitrate of silver, phenic acid, etc., or as the author does in his service, apply a paste containing one part of chloride of zinc, nine parts of oxide of zinc and a quantity of water sufficient to make into a paste. These caustics are to be applied as frequently as is necessary to destroy the virulence of the chancre and transform it into a simple wound, 3.—When this effect has been obtained, and in the intervals of the caustic applications, permanent dressings with feeble antiseptics in powder or in solutions, and for this purpose are employed iodoform aristol, nitrate of silver, etc. Until complete cicatrization the patient must keep as quiet as possible and avoid all irritating contacts which might aggravate the chancre or provoke the appearance of bubo. For my own part, in simple cases the treatment which I have always seen succeed the best is: 1.—Washing morning and night with boric acid water, as hot as possible. 2.—Applications once a day with a nitrate of silver solution, one in twenty. 3.—Dressing rigorously carried out with powdered iodoform. 4.—A protecting covering, well made.

DR. L. BROcq.

Society Transactions.

NEW YORK DERMATOLOGICAL SOCIETY.

220TH REGULAR MEETING.

DR. ELLIOT, *President, in the Chair.*

Erythema Papulosum vel Urticatum, Figuratum, Perstans et Chronicum.
Presented by DR. LUSTGARTEN.

The patient, 21 years of age, male, was struck by a horse against the head, November 21, 1891, so that he had to be trephined. On January 11, 1892, an eruption, preceded by moderate headache, feeling of pressure in the stomach and constipation, appeared on his body and gradually spread to the lower extremities. The lesions, in the shape of annular and gyrated patches with elevated borders, may remain for weeks and months, and then disappear, leaving the skin pigmented, but new patches constantly are added. There is very slight itching and hardly any subjective disturbance connected with the eruption. Having consecutively administered without any decided effect salol and antipyrin, iodide of potash, salicylate of soda, solution of 1 per cent. ars. of soda to 40 drops, antifebrin, Karlsbad and Marienbad salts, arsenic again to 60 drops pro die., salol and ol. santal, and finally atropine, Dr. Lustgarten would be glad to receive suggestions as to further therapeutic measures. The disease itself he would consider a reflex neurosis, of traumatic origin, as another etiological factor could not be ascertained.

DR. JACKSON agreed with the diagnosis, and considered it a reflex neurosis perhaps from some lesion of the brain.

DR. ALEXANDER inquired whether no influence at all on the affection had been observed from any of the drugs?

DR. BRONSON suggested sulphate of strychnia in increasing doses gradually up to one-twelfth or one-eighth of a grain.

DR. KLOTZ thought that ergot might deserve a trial.

DR. ELLIOT has seen very good effects from iodide of potash, particularly in the bullous forms of erythema, in which syphilis was not a factor. In certain other instances of erythema multiforme, which had been ushered in by general constitutional symptoms, anorexia, etc., the iodide in doses of gr. v. three times a day, had acted very well.

DR. MORROW stated that Villemain had several years ago published excellent results from iodide of potash.

DR. LUSTGARTEN replied that larger doses of arsenic seemed to have had a favorable effect, but had to be given up on account of intervening sickness of other kind. He did not expect much from ergot after his experience in other cases of a similar nature.

DR. ELLIOT thought that the case greatly resembled one published in the *International Atlas of Dermatology*. Mild application of the paquelin cautery to the spine from the nape to the sacrum, reddening the skin without really forming an eschar, might be tried; he had seen good results, which were at least temporary, from its use.

Syphilitic Nodes of the Hyoid Bone.¹—DR. ELLIOT read a paper with this title.

DR. MORROW did not remember ever to have observed the occurrence of nodes in this locality, and thought the paper very interesting.

The appearance of leucorrhœa as an incidental effect of the administration of iodide of potash was, so far as he knew, very unusual; the repeatedly observed recurrence of the symptom on repeated trials of the remedy would seem, in this case, to furnish positive evidence of a causal relation between them.

DR. SHERWELL said that Dr. Elliot's paper recalled to him the case of a patient whom he is treating for an intralaryngeal ulceration. There was a distinct history of syphilis present : infection twelve years ago, followed by an eruption. The patient is complaining of very severe dysphagic pains, for which the laryngeal affection seems hardly a sufficient explanation, as in syphilitic ulcerations generally we do not get as much pain in swallowing as in phthisical ulceration. He will now carefully look out for possible nodes on the hyoid bone, all the more so as the patient is improving under specific treatment. He is under the impression that Fournier and others have reported cases where children were born free, or apparently free, from syphilis by mothers who had been infected shortly after conception.

DR. BRONSON was interested in the question of the condition of the child. He thought that the child may indeed be considered infected with syphilis, although it did not present any symptoms of the disease. He certainly believed that the child could not contract syphilis at the present time.

In answer to a question by Dr. Bulkley about the time of infection, Dr. Elliot stated the end of July, 1890, the date having been ascertained almost to the day. The husband, known by his wife to be infected with syphilis, had connection with her, using a condom, but once it was ruptured without being noticed, and it seems that infection and conception, as far as could be judged, took place on that same occasion.

DR. BULKLEY does not believe that the child necessarily has syphilis. The woman seemed to present an example of the peculiar tendency of syphilis to appear principally in the formation of nodes on the bone in preference to skin affections, etc., which he had observed on several occasions, particularly in a young lady innocently infected, who presented a number of nodes on the ribs for several years.

DR. KEYES never before saw a case of nodes of the hyoid bone, but one case of total necrosis of the same. He could, however, see no reason why it should be exempted, being in a superficial location and subject to injury.

Dr. Keyes said he certainly believed that occasionally pain in that region might be explained by such affections of the hyoid bone, and therefore thought Dr. Elliot's communication was of great value by directing attention to that locality.

The birth of a child entirely free from syphilis, where the mother had become infected simultaneously with conception, and had been treated only from the fourth month of pregnancy, seemed to be phenomenal. He would presume that such a child was syphilitic. Under such circumstances miscarriage would rather be the rule, the more so, as the mother had two distinct syphilitic eruptions during the time. However, the effects of treat-

¹ See February issue of this Journal.

ment would possibly account for the absence of syphilitic symptoms in the child.

DR. FOSTER felt sure that he had seen it mentioned that leucorrhœa had appeared as the result of the use of iodide of potassium, but he had not himself observed it.

DR. TAYLOR asked whether Dr. Elliot would exclude with absolute certainty the previous existence of some syphilitic lesion of the vagina or uterus? Under treatment such lesions might undergo some change which led to a discharge from the surface, thus producing leucorrhœa.

DR. TAYLOR had seen a case of necrosis of the hyoid bone from syphilis. He saw also the case of a node to which a fistula led, which was finally cured after curetting.

As to the health of the child, it was certainly very unusual that, with both parents the victims of early syphilis, a child should be carried at all to full term. Statistics from Sigmund's Clinic showed that only about 6 per cent. of the children of syphilitic mothers live. If the child, as Dr. Elliot claims, has been under sufficiently exact observation since its birth, it must be considered an unusual instance. He presented a case of a child, at his clinic only last week, whose mother became syphilitic in June, and pregnant in December, from a syphilitic father. In spite of continuous treatment of the mother during pregnancy, the child presented some mucous patches, but except a mild degree of the aged or senile appearance, seemed to be well developed.

DR. BULKLEY called attention to the fact that syphilis may affect one part of the human organism mainly—for instance, the skin or the mucous membranes—while other systems largely escape. Colder climates seem to favor lesions of the mucous membranes. Where the skin escapes, nodes on the deeper portions are liable to appear; perhaps in such cases the poison was more concentrated.

DR. ELLIOT, in closing the discussion, stated that he decidedly believed that the child was still syphilitic, but in his opinion the disease was to a certain degree only latent, owing to the mother's having been under treatment for so many months of her pregnancy. The child, however, was likely to show symptoms of syphilis later, in the same manner as syphilitic persons who had received specific treatment only for a certain length of time. In reply to a question of Dr. Sherwell, who pointed to the importance of dentition in such cases, Dr. Elliot stated that the child did not begin to get teeth until the seventeenth month; that is late, but the teeth themselves came in regular order.

DR. TAYLOR again pointed out the difficulty of proving the entire absence of early symptoms unless a child was under daily observation.

DR. JACKSON spoke of a case of *rhinoscleroma*, the first one, he thought, that had been reported in America. The patient was a Hungarian Jewess, 45 years of age. The new-growth which had existed for eighteen years, occupied two-thirds of the upper lip, involved its mucous as well as cutaneous surface and pushed up the ala nasi considerably on the left side. During the past two years the growth had increased more rapidly than in all the previous years.

DR. SHERWELL reported the case of a woman, 34 years of age, previously in good health, who about middle of September, after slight general symptoms, showed an erythematous eruption of the neck and face and sub-

sequently of the trunk, which looked like an erythema multiforme and did not awake grave suspicions.

It gradually assumed the character of erythema nodosum with some purpura, but after a short time large patches of localized œdema appeared on the chest and other places, which did not disappear in weeks. In the region of mamma this state persisted throughout, being perfectly hard. They presented a peculiar appearance, so that the patient's little girl told her she was "growing fat in lumps." After a while the œdema and purpuric effusions appeared on the arms, where they relatively disappeared again but still left purpuric stains. At the instance of Dr. Morrow he tried iodide of potash in moderately large doses (fifteen to twenty grains t. i. d.), but without any good result. Dyspnœa and heart symptoms rendered her condition extremely painful. These conditions persisted and gradually grew worse. Œdema of legs appeared later on, albumin could at no time be found in the urine, no hemorrhage from the respiratory or alimentary tract could be discovered. Under increasing debility and dyspnœa the patient died about a week ago, numerous œdematous patches with purpuric hue covering the body. Dr. Sherwell thinks that the final stage represented features of *morbus maculosus*.

DR. ROBINSON reported a case of very severe scarlet fever eruption during a recurrence of the disease five months after the first attack, which was also a severe one, the disease attacking at the same time two other members of the family. In the recurrence all the symptoms of scarlet fever, including throat affection, were present, and for forty-eight hours no urine was voided. The child had either convulsions or was comatose, with a temperature reaching 105°F. The dermatitis was so intense that on one fore-arm a number of small bullæ were developed, while upon the other a large blister covered the entire external aspect of the elbow. The child recovered.

DR. ELLIOT mentioned a case of *dermatalgia*, which had persisted for over four months; it had appeared after an attack of rheumatism in a gouty subject without, however, any apparent existing cause. The surface from the inguinal folds to the knees on both legs was so sensitive that the slightest touch from the clothes or rubbing or touching in any way caused severe pain. Even when quiescent he experienced burning pain in the skin. The general health was good, the patient had not had influenza. Similar symptoms had also been observed in another patient, due probably to neurasthenia after typhoid fever, but in this case the sensitiveness changed from one place to another. The pain likewise was a burning one, but accompanied by shooting neuralgic pains.

DR. FOSTER thought that, in the absence of pain except on touch, the name of dermatalgia was not correctly chosen, hyperæsthesia seemed rather to have been the condition present.

DR. MORROW, in connection with a case under observation, spoke of the relation of mercurial treatment and diabetes. He treated a patient who had diabetes four or five years for an eczema of the prepuce and a severe balanoposthitis, which not only caused phimosis but suppurating buboes on both groins. After the healing of the phimosis the patient contracted syphilis and soon had a profusely developed syphilitic eruption. Dr. M. had contemplated the excision of the initial lesion upon its first appearance but the patient finally refused the operation. He later on began mercurial treatment with some misgivings and very cautiously with small doses, until

finally about two grains per diem of the protoiodide of mercury were given. The quantity of the sugar, which never had been less than 4 per cent. but often exceeded 6 per cent., now had fallen to 1 per cent. In answer to a question by Dr. Elliot, he said there had been no change of diet since the patient acquired syphilis. The buboes he considered due to surface infection during the balanoposthitis. The patient at the time had some lymphatic obstruction in one leg.

DR. KEYES remarked that he had never paid much attention to the effects of mercury on sugar in the urine, he had given large doses of the former in the presence of large quantities of sugar without seeing bad results. He mentioned the case of a gentleman with diabetes, on whom he made suprapubic cystotomy for stone. The sugar, which had been almost absent, reappeared in large quantities immediately after the operation together with several disquieting symptoms. - After a large dose of calomel, to relieve obstinate constipation, free evacuations took place and within a few days all the bad symptoms disappeared and the patient entirely recovered.

DR. MORROW does not consider the rule of invariable application that phimosis should not be operated upon in a diabetic person. He did not see any difference in the healing of the buboes which were opened in his case.

DR. KEYES called attention to the difficulties of keeping the operation wound free of infection in cases of operation of phimosis in the presence of chancroids and almost doubted the possibility, if real chancroids were present.

DR. BRONSON reported, that in his hospital services he had recently observed two cases which seemed to him anomalous. At first they looked a little like psoriasis because of the numerous white scaly patches. The scales were, however, too superficial for that disease and there was but little congestion of the cutis. The eruptions occurred very abundantly over the whole body and on the extremities. The efflorescences seemed to begin at the hair follicles as a lichen pilaris, each spot tending to spread at the periphery with desquamation and moderate redness till an area of one-half to three-quarters of an inch or more had been attained. In each case the disease had persisted several months. Microscopic examination of the scales revealed the presence of abundant spores and mycelia closely resembling those of *microsporon furfur*.

In answer to the diagnosis of pityriasis rosea, suggested by Dr. Morrow, Dr. Bronson said that the chronicity of the disease, the amount of scaling as well as the presence of the fungus were opposed to it.

THE NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY, NOVEMBER 10, 1892.

DR. E. L. KEYES, *in the Chair*.

Keloid.—DR. R. W. TAYLOR presented a case of this affection. The patient was a colored woman, 23 years of age, and the mother of two children. She was born and brought up in the South, and when quite young she was obliged to work very hard, carrying heavy loads of brush and stones.

Her clothing was very thin, and the skin about the waist was lacerated and bruised most of the time. On the site of these lacerations about the waist, large masses of keloidal tissue appeared, encircling the waist, and very closely resembling masses of intestine. There was also a large keloid hanging from the right ear, which appeared after the ear was pierced for rings. Similar growths were present on the arms, shoulder and the right breast.

DR. TAYLOR also presented a photograph portraying a case of keloid, the victim of which was a syphilitic woman. He stated that some years ago, in looking over the case-book, he found that in about one-half of one per cent. the cicatrices of syphilis became the seat of keloidal growths. The woman whose photograph he presented was thirty-two years old. She was syphilitic about a year and presented tubercular ulcerative lesions. These rapidly became deep ulcers and after healing were covered with these keloidal cicatrices. They caused a great deal of pain, but eventually underwent involution and became depressed cicatrices. Dr. Taylor said he felt warranted in making the following statement: that we find two forms of keloid attacking syphilitic cicatrices; the acute and succulent variety, which cause a good deal of pain and pruritus, and second, the chronic variety. In the former variety you can generally predict that after remaining for a few months or a year they will undergo involution: the chronic variety which give rise to little discomfort, are permanent. In reply to a question, Dr. Taylor said that keloid growths occur much more frequently in the African race than in any other. One of the peculiarities of the negro skin is that it is so prone to take upon itself these growths, as well as elephantiasis and molluscum fibrosum. Keloid, he has been informed, is very common in the West Indies, following surgical operation or slight irritation of the skin. He has seen one case in which the growth encircled the neck, like a collar. These growths are very prone to recurrence after removal.

DR. E. L. KEYES suggested that after removal, the surface should be immediately covered with Thiersch's skin grafts, avoiding, if possible, all tension of the edges. If good, prompt union of the skin grafts could be secured, it might possibly prevent a recurrence of the growths. Dr. Keyes said he has never tried this method and simply offered it as a suggestion.

DR. SAMUEL ALEXANDER presented a portable apparatus for sterilizing catheters. It consists of a small boiler, with an alcohol lamp underneath it. The boiler has a nozzle or catch projecting from its upper surface, and to this one end of the catheter is attached. The steam, which is rapidly generated, passes through the catheter, thoroughly sterilizing it. If hot water is put into the boiler, it only takes about one minute to get up steam. The silk catheters can also be sterilized by it.

DR. ALEXANDER also presented a pathological specimen, consisting of the kidneys, ureters and bladder of a boy about eighteen years old. The patient, when he came into Bellevue Hospital, gave the following history: Six years before he had suddenly had an attack of retention of urine; he claimed to have had no venereal trouble nor injury to the urethra; he stated, however, that he had been exposed. As to the character of this exposure he was very reticent. Dr. Alexander said he inferred that the boy had been maltreated in some way. His retention was relieved by catheter with great difficulty, and following the operation he began to pass water with much frequency. This symptom continued, and in about four or five months he was unable to hold his water and since then he had worn a urinal. About

eighteen months before entering Bellevue he had been in Montreal, and there a number of unsuccessful attempts had been made to get into his bladder.

Examination showed that the boy was passing purulent urine, in small quantities. Some of this was collected and under the microscope it was found to contain many pus cells, some blood, and a few granular casts. It was loaded with albumin. After numerous unsuccessful attempts to enter the bladder, a perineal opening was made. Through this it was discovered that in the situation of a deep urethra there was a pocket lined with mucous membrane, from which led off several false passages. One of them led to an abscess cavity near the apex of the prostate, from which considerable pus was evacuated. The perineal operation was done under cocaine, and lasted about twenty minutes. The patient did not complain of much pain or discomfort. He passed a very restless night, however, and showed symptoms of uræmia. The retention was complete. The next morning percussion over the region of the bladder revealed a feeling of fullness, and with the aspirator pus was withdrawn. A second attempt was made to enter the bladder through the perineal opening and failed. Under ether, a suprapubic incision was then made, and this immediately revealed a coil of intestine, bound down by an old peritonitis. The bladder itself was contracted into a small, hard ball, lying at the bottom of the pelvis, and feeling to the finger like a hard nut. Seeing that nothing could be done, Dr. Alexander said he simply closed the incision. The patient died thirty-six hours afterwards. At the autopsy a general peritonitis of old standing was discovered; it was probably due to the rupture of an abscess on the left side of the prostate, running up along the bladder wall. The orifice of the left ureter was occluded by a diaphragm stretched across it; the right ureter was pervious. The kidneys had not yet been opened, but they were large in size and cystic in appearance. No stone could be detected in them. The false passages leading back from the pouch in the deep urethra were undoubtedly made by instruments. One led into the abscess cavity, and a very small one led into the bladder. There was consolidation of the apex of the left lung.

DR. KEYES said that from the appearance of the left kidney, he thought that a tubercular pyelo-nephritis had been going on. From this there may have been small deposits at the neck of the bladder, which acted as an irritant, and the bladder became contracted.

DR. J. P. TUTTLE thought that any lung trouble that might have existed was secondary to the kidney lesion. Primary tuberculosis of the kidney is rather a slowly progressing disease, while with secondary tuberculosis life is very short.

DR. ALEXANDER said that in primary tuberculosis of the urinary tract you will find lesions in the seminal vesicles and the prostate to start with. You may have tubercular disease in the lungs arrested by a conservative process, but if the kidneys have been involved the disease may go on there. It is true that where tuberculosis of the urinary tract is secondary to pulmonary tuberculosis, life is very short. Still, exceptions to this rule have occurred.

DR. F. TILDEN BROWN presented a combined contraction-coaptation forceps. It consists of a double mouse-tooth forceps, and can be used so as to take the place of an assistant in simple operations, such as circumcision, in which it is particularly valuable.

The Treatment of Ano-Rectal Fistula.—By DR. JAMES P. TUTTLE.

Dr. Tuttle said that outside of the purely surgical conditions, the treatment of disorders of the rectum has for a long time been largely in the hands of quacks and advertising specialists. Knowledge of, or the time and patience necessary for the local and proper treatment of diseases of the rectum and anus has been so wanting with the general profession, that people suffering from the minor ailments have been, in self defence, driven to those outside of the pale of regular practitioners. The impression has become fixed among the laity that cutting was the only means of treatment known to, or at least practiced by regular physicians in these diseases, and dreading the knife, they have borne their inconvenience with great detriment to health and usefulness, or sought the assistance of some one advertising to cure them without operation. On no other subject, perhaps, has this deception of the public been so great as on that of fistula. Dr. Tuttle said he yields to no one in maintaining a positive and consistent stand for radical treatment in fistula, but he does not believe in routine practice, and where other methods offer equal prospects of a cure, they should at least be tried before resorting to the free use of the knife, especially where that use is attended with dangers of unfortunate secondary results. Out of 337 cases of fistula operated on in the hospitals in New York, Boston and Cincinnati, only 162, barely forty-eight per cent., are even claimed as cures.

Dr. Tuttle said that in almost every case of ano-rectal fistula, a certain amount of cutting is necessary upon the external surface, to drain the fistulous tract or straighten it, but here, upon the surface, the necessary cutting ceases in the majority of cases, and the much dreaded anæsthetic is rarely indispensable. Cocaine suffices for the prevention of pain in the treatment of a large majority of fistulæ, and many patients submit to operation under it who would not take chloroform or ether. The rationale of the treatment of fistula is to vitalize the granulation lining of the abscess cavity, and bring the walls in close contact with one another. This involves the free external drainage of the tract; its tortuosities must be straightened out into one linear canal. Convert the fistula into a cone-shaped cavity with its external opening for a base, scrape it out thoroughly, cauterize the surface, and paralyze temporarily the sphincters and gut as high up as the highest point of the fistula, by stretching. Sub-tegumentary fistulæ usually heal very quickly after being cut. They should be washed out thoroughly with a 1-1000 solution of mercuric chloride, or a fifteen volume solution of peroxide of hydrogen, and then injected with a ten per cent. solution of nitrate of silver and a compress of soft cotton applied; instead of the silver nitrate, equal parts of tincture of iodine and carbolic acid can be employed. The sphincters should be stretched as far as the patient will bear it without an anæsthetic and the bowels well emptied. If this method does not succeed, he resorts to the elastic ligature.

Dr. Tuttle next referred to the sub-muscular fistulæ, and their treatment, and also to the treatment of the more complicated fistulæ, such as the horse-shoe, the watering-pot, the recto-vaginal and vesical and the long tortuous fistulæ, and illustrated the same by a number of interesting cases occurring in his own practice.

DR. CHARLES B. KELSEY said he agreed with Dr. Tuttle's statement that we should do all we can in the treatment of rectal diseases before resorting to operation. It is surprising how much can be done in simple cases

without cutting. A quack in Philadelphia became wealthy in the treatment of fistule by straightening the tract and applying caustic potash. There is a radical difference between an abscess along the rectum and a fistula in ano. An abscess alongside the rectum may no more demand interference with the rectum than one in the arm. The universal practice of entering a probe into a perineal or ischio-rectal abscess and forcing it into the gut is idiotic. If there is healthy tissue between the abscess and the rectal wall, there is no necessity for entering into the gut. Dr. Kelsey said he never employs the elastic ligature. He does not like cutting with a string. It might possibly be employed high up in the rectum if hæmorrhage is feared.

DR. ALEXANDER presented a microscopical specimen of sponge substance. A fine sponge was employed to wipe out the bladder after a suprapubic operation for tubercular ulcers, and among the scrapings certain small particles were found imbedded in blood fibrin. These stained a dark blue color with the staining fluid and were finally recognized as being particles of sponge. Dr. Alexander said he simply presented the specimen to show how small particles of a good sponge may become detached by the gentle pressure upon the mucous membrane and it emphasizes the importance of thoroughly sterilizing the sponges.

SECTION ON GENITO-URINARY SURGERY, STATED MEETING, THURSDAY
EVENING, DECEMBER 8, 1892.

DR. E. L. KEYES, *in the Chair*.

Cystinuria. Report of a Case with Specimens of Urine and Calculus. —
By DR. MORRIS MANGES.

Dr. Manges presented a specimen of the urine and the stone passed in a case of cystinuria. The patient was a male; 22 years of age. The history was that of an ordinary case of renal colic on the right side, the pain lasting for twenty hours. The pain ceased spontaneously, and the man had no other symptoms until four days afterwards when he had an attack of anuria, followed by the passage of this calculus. The stone was of cystine formation, and weighed one gram. It was shaped like a calyx of the kidney. The urine showed the ordinary characteristics of the presence of cystine crystals. The two points of interest in connection with the case, Dr. Manges said, were, first, that a calculus of this size should be passed spontaneously, and second, the present views that are held regarding cystinuria. The researches of Udransky, Bauman and Brieger show that the urine of patients suffering from cystinuria contain two diamines, namely, putrescine and cadaverine. The only other disease in which these products have been found is Asiatic cholera. It has been suggested that the cystine is due to some bacteriological influence in the colon.

DR. SAMUEL ALEXANDER stated that he has seen two cases wherein calculi and blood-clots of large size were spontaneously passed from the kidney without marked dilatation of the ureter being noticeable afterwards. It simply shows the dilatability of the ureters.

DR. MENDELSON referred to a case of cystinuria coming under his observation in a patient who was apparently in perfect health. The urine was filled with cystine crystals.

DR. R. W. TAYLOR referred to the similarity between cystine and uric

acid crystals; the differential diagnosis between the two can only be made with the aid of chemicals. For this reason, cystinuria might be a more frequent condition than we think it is.

A Case of Gangrene of the Vulva.—DR. R. W. TAYLOR presented a photograph of this case. Gangrene of the vulva, he said, is a rather infrequent condition. Among the lower classes, particularly in neurotic and debilitated subjects, it is sometimes observed as an accident of parturition. We also know that in the course of certain fevers, typhoid, typhus, measles, etc., gangrene of the vulva is sometimes seen. It may also occur as a complication of gonorrhœa, but that is rather rare.

The patient whose photograph was presented by Dr. Taylor was a female; widow; 27 years of age. She gave no history of any trouble of any kind, except that she had a recto-vaginal fistula. She entered the hospital October 4, 1892. The vulva was surrounded by an inflammatory process which was very characteristic of gangrene. The gangrenous tissue was black as a ripe grape, and extended from the pubes downward, sparing the labia minora and part of the labia majora, and stretching in two horn-like processes nearly as far as the sacral region. The anus was not attacked. This black necrotic mass flattened down into a slough, which was of a blackish green color. The odor was horrible. The woman never had a temperature above 102, and was not very sick; her pulse remained about 100. She had no typhoid symptoms. The process commenced about the end of September, and its growth was very rapid. The slough separated October 9th and the woman is now getting well. Poultices of flax-seed and charcoal were first applied, and then a compress soaked in a 1-1000 bichloride of mercury solution, which acted very well indeed. The slough separated nicely and granulations began to appear. The strong bichloride solution employed set up a diarrhœa, and iodoform and glycerine were used instead. This was followed by bismuth and later by peroxide of hydrogen, which did not act as well as the bichloride. Balsam of Peru is now being used. The parts have nearly cicatrized. After her recovery she will probably be unable to open her thighs as widely as before, on account of the cicatricial tissue that is forming. The interesting features of the case, Dr. Taylor said, are the lightning-like formation of the gangrene; the development of the slough, which consisted largely of tissue detritus and microbes; the prompt action of the bichloride; the absence of marked constitutional symptoms and the rapid healing of the wound.

DR. TAYLOR said he has seen a number of cases of gangrene of the penis and vulva, but never one quite so extensive as this. As to the etiology of the case, he knew very little about it. The woman was stolid, and only a few statements could be obtained from her. She said that the growth commenced as a little red lump, located about the middle of the free and of the labia majora. It was probably due to some microbe of great virulence. The fact that in many instances such a gangrene occurs in the course of an infectious disease points to its microbial character. The woman presented no morbid condition, excepting the recto-vaginal fistula, and he could not satisfy himself that this had a causative relation to the gangrenous process. The woman was perfectly healthy so far as could be judged; her urine contained neither albumen nor sugar. The chasm left by the separated slough was so deep that two fingers could easily be buried in it.

DR. ALEXANDER said that in 1891 Albarran and others discovered in pus from the bladder the bacillus liquifaciens septicus, pure cultures of which injected into the cellular tissues produced an intense gangrene. The existence of the recto-vaginal fistula, he said, suggested the possibility of this microbe being the etiological factor in the case.

DR. C. W. ALLEN suggested that the case might possibly have been one of noma; the noma which occurs in cancrum oris, destroying the cheek and usually resulting in death. The same process, he thought, has been found in the vulva. In regard to the treatment, Dr. Allen referred to the permanent warm bath, touching the granulating surface each day with a solution of silver nitrate; this method, he thought, would leave a more pliable cicatrix.

In reply to a question, Dr. Taylor said that skin grafting had been considered, but the idea abandoned. The prolonged warm bath, he said, would have been too debilitating in her case.

Discussion of the Question, "Cylindroids, or Mucus Casts in the Urine—Their Significance."—DR. MORRIS MANGES opened the discussion. He stated that although writers had not infrequently called attention to bodies in the urine whose form resembled that of normal casts, yet it was not until 1870 that Thomas, while observing the urine in scarlet fever, carefully studied the forms to which he gave the name of cylindroids. This name he applied not only on account of their resemblance to true casts, but because they so frequently occurred with the latter, and also reacted in a similar manner towards acetic acid. Rorida carefully analyzed them chemically, and showed the identity of their composition with that of renal casts. Most writers on this subject agree in some measure at least in recognizing cylindroids as renal products, bearing a more or less close resemblance to hyaline casts. Other authors regard them only as forms of mucin. The delicacy of their contours and the fact that fairly good lenses are required for their detection, may explain why cylindroids are so often overlooked. When once recognized, it is surprising how often they may be observed. They are ribbon-like forms, usually of great length and of about the same diameter as renal casts. They may assume various shapes, due to bends and twists, giving them a cork-screw appearance. The extremities are narrow and elongated, and often bifurcated. Sub-division into three, four or even five branches, is by no means rare. Their outlines are definite, although more highly refracting than hyaline casts. A very characteristic feature is the longitudinal situation of various grades of delicacy; these markings not alone assist us in finding them, but also are a very important diagnostic feature which distinguishes them from true cylindroids. They may occur isolated or in groups of two or three, or even in large snarls. But infrequently a specimen is at once cast and cylindroid, as where one end of a cast terminates in spiral striated form. Cylindroids may occur enclosed in hyaline casts. Like true casts, they may bear various forms of epithelium, red and white blood cells, crystals, detritus, fat droplets and bacteria. These may be enclosed, or may simply be adherent. When covered with amorphous deposits they may strongly resemble granular casts. Their length is characteristic: Bizzozero asserts that they may even be one millimeter long.

A classification of these bodies into two great groups, the true and the

false cylindroid, is of importance not alone in estimating their diagnostic significance, but also in explaining the difference of opinion held by various writers on the subject. That some cylindroids are renal in origin is positively shown by the fact that Von Torok and Pollak have actually seen them in the uriniferous tubules, in sections of a large white kidney, and in numerous cases of chronic parenchymatous nephritis. Another very strong proof that the cylindroids are formed in the kidneys is shown in the curious casts enclosing cylindroids. Dr. Manges said that he has seen the cylindroids in the urine drawn by the catheter in cases where there was absolutely no indication of pyelitis or cystitis. On the other hand, it is just as certain that others are formed outside of the kidney. They are readily observed in the secretions of the prostate, Cowper's and Littre's glands, the bladder, the vagina, the uterus and the urethra.

The exact composition of casts being unknown, a corresponding degree of uncertainty must necessarily exist concerning the nature of the basement substance of cylindroids. Of the theories put forth to explain how casts are formed, that which assumes that they are due to the coagulation of the albuminous transudate into the tubule is the only one that comes into play when considering the origin of renal cylindroids. Their very form speaks for the correctness of this assumption. Pseudo-cylindroids are simply bands of mucin precipitated in the excretory duct of the various glands by the acid reaction of the urine. False cylindroids have absolutely no relation to albuminuria, but appear to accompany mucinuria.

For the purpose of studying the general characteristics of cylindroids the urine of any patient suffering from gonorrhœa offers a good field, since the forms here presented are easily recognized on account of the distinctness of the longitudinal striations, their great refracting power and their length. They are most readily found in freshly voided urine, especially if the minute flakes which are often enclosed in the mucus be examined. The greatest difficulty will be encountered in distinguishing the true from the false. The only absolute test is the solubility of the former in acetic acid, and the insolubility of the latter in the same reagent. However, the accuracy of this test is vitiated by the fact that some pseudo-cylindroids will swell up on the addition of this reagent and apparently disappear. The presence of albumin, casts and renal epithelial cells would lead us to expect the renal forms, while the excess of mucin, the admixture with products from the bladder, prostate, urethra, vagina and uterus would indicate pseudo-cylindroids. In the latter also the striations are coarser, the refractive power is greater, the diameter varies more, the extremities are more frequently divided into more than two branches—in a word, the less the resemblance to true casts, the greater the possibility that we are dealing with pseudo-cylindroids. Naturally, the differentiation is materially aided by the presence of adventitious products, namely, spermatozoa, epithelium of the lower urinary tract, etc. From casts, cylindroids may readily be distinguished by their irregular contour and above all, by the longitudinal striations already referred to. Granular casts may be closely simulated where many of these characteristics have been obliterated by amorphous deposits.

What is the significance of these cylindroids, and what prognostic conclusions may be drawn from them? The pseudo-cylindroid, as such, may be dismissed without another word, as their significance is limited to simply recognizing them. The significance of the true renal variety is about the

same as that of hyaline casts. But the value of such inference is materially lessened by the great difficulties which often attend the differentiation between the two. Various observers have found it impossible to do this in some cases. We are not justified, therefore, in attributing any absolute diagnostic significance to cylindroids, as these doubtful cases usually occur where our other means of diagnosing nephritis also leaves us in the lurch. Such a conclusion once more reminds us that a diagnosis of nephritis ought not to be made from the examination of the urine alone, but that all the other organs should be interrogated before making absolute statements as to the existence of renal disease.

DR. SAMUEL ALEXANDER stated that in two cases coming under his observation the presence of these cylindroids in the urine was the forerunner of chronic interstitial nephritis. As far as the false cylindroids are concerned, he has not been able to find them as often as the literature on the subject had led him to expect.

DR. MENDELSON said that these cylindroids were of very common occurrence in the urine. Very few specimens of urine could be examined thoroughly without finding some of them, either of the true or false variety. To the latter he has never attached any importance, merely regarding them as due to some irritation of the urinary tract. They are almost invariably found in oxaluria. When true cylindroids are found, we should look very carefully for hyaline casts.

The discussion was then closed by Dr. Manges.

Items.

Chronic Pneumonia at the base of the lungs, characterized by dullness, tubular souffle, numerous sub-crepitant rales, cough, etc., in a syphilitic, and due to the specific disease is recorded by Brocq. The sputum contained no pneumo-cocci and no tubercle bacilli. Recovery was complete at the end of a month under mercurials.

Arthritis of true syphilitic nature appears to be not infrequent. In a lecture on syphilitic joint diseases Hutchinson (*Brit. Med. Jour.*, April 16, 1892) suggests the following divisions.

1. Synovitis during the secondary stage, of short duration and very amenable to mercurials.

2. Perisynovial gummata.

3. Arthritis due to osseous nodes in the neighborhood of joints.

4. True chronic synovitis.

5. Syphilitic chondro-arthritis.

Any of these may occur in the late stages of inherited syphilis and in addition.

1. Epiphysitis in syphilitic infants involves the joints in a suppurative process.

2. Chronic effusion into one or more joints, especially the knees, is a fairly frequent occurrence at about the time of puberty.

Enderteritis causing symptoms of mental confusion, vertigo, failing memory, especially for recent events, enfeebled and slightly wasted extremi-

ities, lack of radial pulse at the right wrist for six months, speech slow, hesitant and slightly ataxic, exaggeration of tendon-reflexes, loss of consciousness succeeded by right hemiplegia and aphasia, gangrene of great toe, diminished urine, albumin and casts and death in a man of six years syphilitic, is recorded by Kanders (*Wien. med. Woch*, No. 42, 1891). The autopsy showed an area of softening in the left temporal lobe, and the artery of the fossa of Sylvius occupied by a thrombus. Many arteries were diminished in lumen by thickening of the intima.

Periarteritis.—In initial syphilitic periarteritis Artigalas says (*Languedoc Medical* No. 4, 1892), there forms in the external cellular tunic an induration which spreads little by little until a ring is formed. This is composed of elements dissociated from the affected tunic and of numerous leucocytes coming from the exterior. The middle tunic is infiltrated and separated in its turn by white globules, the calibre of the vessel is diminished and endarteritis is produced, and possibly the vessel may be entirely and suddenly obliterated or the cause may be slow and chronic and the arteritis of a sclerous nature.

Immunity, rather than latent syphilis by *choc en retour* is thought by Neumann to be the condition of mothers who bear syphilitic children and remain themselves free from signs of the disease.

Pseudo-chancere redux or chancere-like syphiloma of Fournier is a late manifestation reproducing absolutely the appearances of an initial lesion, and as it is sometimes accompanied by a generalized eruption, has been mistaken for an evidence of reinfection. According to Morel-Lavallée the lesion is chronologically a secundo-tertiary one and is of the nature of a tuberculo-gumous syphiloma.

Diabetic Coma. MM. ROQUE, DEVIC AND HUGOUNENG (*Rev. Gen. de Méd. de Chir. et D'Obstet.* January 11, 1893).

Every one knows that the theories of diabetic coma, of toxic origin, have invoked successively acetone, diacetic acid and oxybutyric acid. The authors have analyzed in one case the blood of a diabetic patient who had died in coma, and stated that it showed great loss of alkalinity. This acid serum, inoculated upon a rabbit, was shown to be very toxic; brought back to its normal alkalinity by the addition of soda, it was demonstrated to be endowed with a power very much diminished. The acidity of the blood, therefore, plays a rôle; it remains to be determined what that acid is. Chemical reactions have not been able to show the slightest trace of the acids mentioned, but they have revealed the presence in the blood of an acid which is allied to lævo-rotatory butyric acid, but is of an undetermined nature.

The authors think that these acids are incomplete products of glucose, and that they, accumulating, give the blood its toxic properties. In any case, the knowledge of this fact that the toxicity of the blood can be diminished by bringing it back to its normal alkalinity, can be employed in the therapeutics of the disease, in spite of the ill success of the intravenous injections of sodium bicarbonate, employed by Lépine in a similar case.

JOHNSTON.

Infectious Nephritis, due to the Coli-Bacillus CHANTEMESSE AND WIDAL
(*La Semaine Médicale*. January 4, 1893).

This case was one of pyo-nephritis, observed in a woman of 42, supervening on her convalescence from typhoid fever. Several days before her death, the coli-bacillus had been demonstrated in the urine in great abundance, in a state of purity, which caused energetic fermentation of lactose. It is, therefore, necessary to make a distinction between this bacillus and that of Eberth. They may be differentiated by the fact that the typhoid bacillus cannot be grown in a medium in which it has already lived, and by the absolute impossibility of making lactose ferment with the typhoid bacillus, whatever is its virulence. Another distinctive sign consists in a morphological difference: each young element of the bacillus of Eberth shows twelve to fifteen flagella, while the spores of the coli-bacillus can number only four to eight.

JOHNSTON.

Albuminuria. PAUL GASTON (*Archives Générales de Médecine*. December 1892).

The author confines his attention, in this paper, to the ætiology and varieties of albuminuria. He denies the existence of the so-called physiological albuminuria, claiming that the renal lesions or the concomitant disease is overlooked; in his own words, "that there does not exist an albuminuria without functional or organic lesions of the renal filter, no assertion being made as to the site of the trouble.

The pathogenesis, he considers in two great classes, Albuminuria, Symptom of General Disorder and Albuminuria, Symptom of Nephritis. In the first division, the majority of cases arise from circulatory, nervous, thermic toxic or infectious disturbances which are described at some length. Special attention is called to febrile albuminuria in which a number of factors enter; fever, infection, the state of the blood, etc.; albuminuria of non-febrile diseases such as scurvy, diabetes, anæmia, due generally to renal changes of vascular origin: albuminuria in affections of the nervous system, epilepsy, delirium tremens, Basedoin's disease; albuminuria in affections of the digestive canal, diarrhœa, intestinal obstruction; albuminuria from venous stasis, from cardiac lesions; albuminuria from respiratory troubles, where many elements have equal part; lack of oxygen, incomplete combustion of albuminoids; albuminuria of pregnancy, probably of circulatory origin.

In the second class, Gaston passes in review all the varieties of nephritis, forming two artificial groups in their relation to albuminuria; those with abundant albuminuria, due to acute diffuse and acute and chronic parenchymatoses nephritis; those where glandular suppression is marked and where albuminuria is rare; due to the chronic interstitial variety. Finally, there are the amyloid and "localized" nephritis, the latter from tumors, cancer, tuberculosis, etc., both of which progress *pari passu* with albuminuria.

In giving a prognosis, it should never be neglected to study the relation between the albuminuria, the urinary peculiarities and the general condition of the patient.

JOHNSTON.

FIG. I.



FIG. II.



FIG. III.

DR TAYLOR'S ARTICLE ON ATROPHY OF THE SKIN.

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A CASE OF LOCALIZED IDIOPATHIC ATROPHY OF THE SKIN.¹

BY

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CASES of localized idiopathic atrophy of the skin are so rare that it is well for those meeting them to put them on record. While our knowledge is quite complete as to the linear atrophies of the skin, the striæ atrophicæ, and while many cases have been reported in which nervous disturbance has resulted in more or less atrophy of the skin, the published cases of localized atrophy of indeterminate origin, or, as they are termed, cases of idiopathic atrophy, are quite rare, and their pathogenesis is wholly unknown. This condition of affairs warrants the publication of the following case, which is, in my experience, unique, and of which I have been unable, in spite of a quite thorough search in literature, to find more or less similar examples.

The patient is a lady, aged 26, of healthy parentage, and is herself in excellent health. She has been married eight years and has had a miscarriage of unknown origin at the sixth month. Neither she nor her husband is syphilitic. She once had a bad cold which was called pleurisy. She has never suffered from any nervous affection, nor has she had any symptoms pointing to nervous exhaustion. Being a brunette, she has the usual dark skin of that class. When this lady was

¹ Read before the American Dermatological Association, September 13, 1892.

a little more than twenty-three years old a companion noticed a white spot behind her right ear which was described as looking as if the part had been touched with carbolic acid. No symptoms had at this time been noted, but shortly after a mild sensation of pruritus was experienced, which has occurred at intervals ever since.

The patient came under my observation in August, 1890, being then twenty-four years old. At that time she presented a lesion of the skin behind the right ear and approaching on the skin of that organ, which is strikingly well-shown in Fig. 1. (See plate.) There was an irregularly oval vertical patch of extreme whiteness, which was encircled by a violent red zone of dilated vessels. My first impression was that the case was one of morphea, and in that view I was confirmed by Dr. Levisur, who then assisted me at the clinic. But on palpation the lardaceous hardness of morphea was not felt and the tip of the finger revealed a suspicion that the skin was thinned. This led to the examination of the patch by pinching it up with a forceps and by this procedure and by comparison with the skin behind the left ear it was definitely proved that the patch was the seat of atrophy. Examination with a magnifying glass showed that the epidermal layer was thinned and finely wrinkled, showing no longer its natural lines, and that the violaceous halo was due to congested capillaries. Minute hairs were absent. Observation without treatment for a period of four or five months showed that the atrophic patch grew slowly along its entire margin.

About January, 1891, under cocaine-anæsthesia, I removed the lower portion of the patch, extending from the lower limit of the ear well down into the healthy skin of the neck. The wound, aseptically treated, healed in a short time and left a smooth, nice cicatrix. Nothing else of real therapeutic value was done, the applications being in reality placebos, but, to my surprise, the morbid process ceased to extend, the violaceous halo grew dim, and in its place a few minute superficial vessels were left, while the white patch became clouded by brownish pigmentation. This discoloration began at the violaceous margin and extended inwards.

In Fig. 2 the lesion is shown as it appeared in the Summer of 1892, when the retrogressive processes were well under way. The lesion was then two and a half years old.

The subsequent course of this case is very uneventful. The pigmentation has gradually extended and become rather

deeper, until now, September, 1892, the appearances are markedly different from those which I first saw two years ago. Now there is simply an atrophied skin, more or less evenly discolored, in fact, instead of a dead-white patch behind the ear, there is a similar expanse of dirty brown. There is no evidence of depression of the skin surface, nor was such present at any time. Even with the blades of a forceps it is impossible to exactly locate the margin of the atrophic patch.

As I have said before, the only subjective symptom present was mild and inconstant pruritus, which gave the patient no concern. Tested for hyperæsthesia or anæsthesia, or for the effect of heat or cold, this morbid area differed in no way from its corresponding healthy area of the left side. Every other portion of this woman's skin was normal in appearance.

This case is an example of an affection little known and not well understood, which is treated of but by few text books. Kaposi and Wilson speak of round or oval patches of skin atrophy, but add little to our knowledge of the subject. Leloir and Vidal¹ correctly, in my judgment, divide partial atrophy of the skin into (A) idiopathic partial atrophy; (B) striæ atrophicæ, or vergétures, and (C) partial atrophy, symptomatic of a central or peripheral lesion of the nervous system.

The first form, of which my case is an example, they consider as rare, presenting round or oval, at first white, and later on brownish, patches of the size of a quarter of a dollar, or of one or two inches. These authors speak of the case of a girl, thirteen and a half years old who presented more than twenty such patches. They say that sensation is not impaired, and in this my case bears them out.

The striking feature of my case, next to the dead-white color, was the violaceous halo. It was this which led me to make the provisional diagnosis of *morphœa alba atrophica*. I was also influenced by the recollection of the case of a girl, aged six years, of which I now show a colored drawing. (See Fig. 3.) In this case a typical patch of lardaceous *morphœa* was seen to the right of the median line, just above the scapula. Co-existing with this lesion was an atrophic patch of dead-white color, surrounded by a ring of pink color. The atrophy of this patch was well marked and was not consequent upon a previous infiltration, lardaceous or other.

¹ *Traité Descriptif des Maladies de la Peau.*, 1889, page 67, et seq.

Wilson speaks of the co-existence in some cases of lardaceous and atrophic morphœa. Long observation of the case which forms the subject of this paper has convinced me that it is essentially one of atrophy of the skin with a peculiar course, and that its lesion is not in any way allied to morphœa.

Under the title "Erythematous Atropho-derma in Plaques, with Excentric Progression," Thibierge¹ has lately reported a case of atrophy of the skin presenting a peculiar course. The lesions were small, round spots, the larger one on the right cheek over the malar bone; the other, smaller and situated just under the left ear. In this case the redness extended over the whole patch while the atrophic process was going on, but the lesion, as it was in my case, was sharply limited and the atrophic surface afterwards became of a brown color. In the discussion of Thibierge's case, Vidal stated that the cheeks are the places of election of this lesion; that the patches are generally white, yellowish or brown, and that violaceous or red coloration is exceptional.

In this connection I may refer to a case reported by me and shown before the New York Dermatological Society in 1875,² which is very interesting and which has not attracted the attention it deserves. It was that of a woman, forty-five years old, who, without known cause, was attacked by atrophy of the skin in round and oval spots situated on the flexor surfaces of the arms and forearms, the abdomen, and outer surface of the thighs. These spots began as light-brown discolorations which, by desquamation of their superficial epithelium, became whitish, pearly patches of atrophic skin, slightly depressed and with follicular openings into which small pins could be placed. Seen years after the inception of this process, the spots looked less white and pearly, but still smooth and depressed.

From the foregoing considerations it will be seen that there is a localized or partial form of idiopathic atrophy of the skin in the shape of round or oval spots, which may run a more or less regular course, and which is seen most generally about the face and neck and exceptionally elsewhere over the body. In correlation with this clinical group we have another, comprising cases of idiopathic atrophy of much greater extent, involving portions or entire regions of the body, most commonly the extremities, and also the trunk itself. In this group may be in-

¹ Bulletin la de Société Française de Dermatologie et de Syphiligraphie, 1891, p. 452.

² Archives of Dermatology, page 114 et seq. Vol. 2, 1876.

cluded the cases of Buchwald,¹ Touton,² Pospelow,³ and the recently published case of Jadassohn,⁴ from a study of which a good idea of the affections may be gained.

Microscopical Examination: by Dr. Van Gieson.

All of the layers of the skin as well as its adnexa are quite extensively changed.

The *rete mucosum* is very thin, and does not show the usual inter-papillary prolongations; these have almost entirely disappeared, and the rete appears as a smooth, continuous layer, without any folds on either surface, except the mouth of an occasional hair follicle. The horny layer is exceedingly thin in places, and forms but a mere bounding surface line in the sections. The lowermost cells of the rete are irregularly pigmented with brownish granules. In one or two very small areas the rete mucosum is absent, so that there are fine lines or furrows where the corium is bare. One portion of the rete, about one millimeter in diameter, contains a flattened vesicle. The horny layer and the uppermost rete cells are separated for a minute distance from the lower cells by a quantity of granular material or fluid. This vesicle is so minute that it would hardly be detected without the microscope.

The conspicuous change in the *papillary portion of the derma* is the quite uniform absence of the papillæ. The connective tissue cells are also considerably diminished in number. There seem to be no blood vessels at all in this region of the derma; at least, no traces of vessels could be found in the sections; they seem to have been quite thoroughly obliterated. The inter-fibrillary spaces of this part of the derma contain very irregularly distributed rows and clusters of brownish pigment granules.

The sub-cutaneous connective tissue shows the same scarcity of blood vessels, and a similar diminution in the quantity of the connective tissue cells. Several medium sized arterioles were found in the sections, completely obliterated or converted into partially hyalin cylinders. The connective tissue fibre bundles are properly arranged, and do not appear any denser than in

¹ Ein Fall von diffuser idiopathischer Haut-atrophie. Vierteljahr. für Derm. und Syph., 1883, p. 553.

² Ein Fall von Erworbenener idiopathischer atrophie der Haut. Deutsch. Med. Wochenschr. 1886, XII. 6-8.

³ Cas d' une atrophie idiopathique de la Peau. Annales de Dermat. et de Syphiligraphie. 1886, p. 505.

⁴ Ueber eine eigenartige Form von Atrophia Maculosa Cutis. Ergänzungshefte (1) Zum Archiv. für Derm. und Syphilis, 1892, p. 342, et seq.

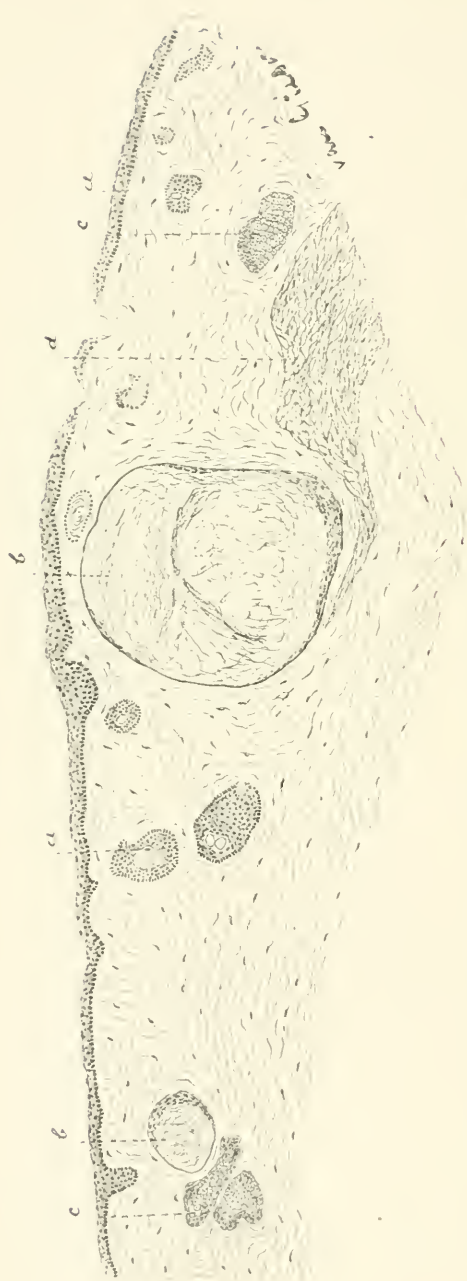


Fig. 4.—A section of the skin, showing the absence of papillae, and inter-papillary prolongations of the rete mucosum, atrophy of the sebaceous glands, and atrophy and cystic degeneration of the hair follicles. *aa*, atrophic hair follicles; *bb*, hair follicles converted into cysts lined with flattened cells and filled with flattened cells and squeezed together especially in the neighborhood of the large cyst *b*.

normal skins, but the oil immersion lens shows evidence of degenerative changes in some of the longitudinal bundles in the presence of groups of fine granules. The connective tissue fibres in the papillary derma seem somewhat more compactly arranged than in normal skin (from the neck). Scattered all through both portions of the derma are fine irregular lines which stain deeply with hæmatoxylin; many of these lines seem to be the distorted and irregularly elongated nuclei of degenerated connective tissue cells.

The *hair follicles* are fairly numerous in the sections; some of them (Fig. 4, *aa*), show atrophic changes and lanugo hairs; and others (Fig. 4, *bb*), have been converted into larger and smaller cysts.

These cysts are lined with an irregular thin layer of flattened cells, and are filled up with epithelial scales, which, in places, are very densely matted together. The larger cysts show evidences of pressure in the surrounding tissues. Thus, the fat cells (Fig. 4, d), near one of the larger cysts are squeezed together, and the surrounding connective tissue bundles are pressed together and are arranged concentrically about the cysts.

The *sebaceous glands* are atrophic. They are smaller than normal and their cells are degenerated (Fig. 4, cc). The *sweat glands* are also degenerated. The *membrana propria* is indistinct, and the lining cells are desquamated and converted into groups of distorted nuclei having but little or no protoplasm.

Anatomical Diagnosis.—Atrophy of the skin and cystic degeneration of the hair follicles and sebaceous glands.

Remarks.—It would be interesting to study the condition of the nerve fascicles in this lesion of the skin, but no nerve bundles were found in any of the sections. The lymph spaces or inter-fibrillary spaces in the derma show nothing unusual aside from the presence of the pigment granules. Probably some of the spaces are obliterated, but there are no changes or proliferation in the lining endothelial cells.

So few blood vessels were found in the limited material from a single apparently advanced stage of development of this disease of the skin, that no comments on the causal relation of the lesions of the blood vessels can be presented. The interesting question whether the obliteration of the blood vessels is a primary or secondary lesion is very difficult to determine from these sections.

The hyalin degeneration of the connective tissue bundles of the derma noted by some observers in this condition of the skin, does not seem to be present in this case. There are a few hyalin islets here and there in the papillary and deeper portions of the derma, but these appear to be due to a hyalin degeneration of old atrophied hair follicles, rather than to a hyalin change in the connective tissue bundles.

A CONTRIBUTION TO THE HISTOLOGY OF PSORIASIS.¹

BY

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EARLY in January of the present year a man about 45 years of age was sent by his physician in a neighboring town, to my clinic for advice. I found him suffering from psoriasis which had afflicted him for a long time. He stated that for the past fifteen years he had never been entirely free from the eruption, although at times it was less extensive than at present. On examination I found that fully nine-tenths of the surface of the body was involved by an eruption which was characterized by redness and excessive thickening of the skin. The characteristic thick imbricated scales peculiar to psoriasis were not apparent. In explanation of this, the patient stated that it was his daily custom to rub the entire surface with pumice stone. If he were to omit this procedure the skin would in a few days become profusely covered with thick scales; and the use of the pumice-stone was the only means that he had found that enabled him to exist in comparative comfort.

A piece of skin from the outer aspect of the arm, between the shoulder and the elbow was excised. After fixation in mercury-salt solution it was hardened and sectioned. On examination of the sections under a low power (lens of about 18 mm. focus), the most noticeable changes were:

Derma : Increased in thickness due to increase in the number and size of the connective tissue bundles together with an unusual development of unstriped muscular tissue.

Epidermis : The rete was enormously thickened and the stratum granulosum presented an unusual degree of development. External to this there were several layers of semi transparent nucleated cells, bearing a certain resemblance to those of the stratum corneum, and which without further examination would undoubtedly be taken for them.

Nothing abnormal was discovered in connection with the appendages. The hairs, follicles, sebaceous glands and sudatory apparatus appeared to be in a normal condition and capable of performing their several functions in a proper manner.

¹ Read at a Meeting of the New York Dermatological Society, February 28, 1893.

The photo-micrograph (Fig. 1), enables most of the changes thus far described to be readily perceived.

On examination of the sections with higher powers (lenses of six and four millimeters equivalent focus), some additional points of interest are brought into view.

As regards the *derma* nothing can be added to the general description given except in way of confirmation. The higher



FIG. 1.

PSORIASIS INVETERATA (GUNDLACH $3\frac{1}{4}'$ X 57).

power lenses having greater apertures than the lower ones, of course, enable details to be more clearly defined independent entirely of the question of amplification. In the cells of the sebaceous glands the minute fatty granules usually from twelve to sixteen in number can be made out with perfect distinctness showing no pathological deviations. The sudatory apparatus both in its secreting and efferent portions presents a perfectly normal appearance.

Passing upward to the *stratum malpighii*, we find this layer excessively but very uniformly thickened; the majority of its cells, however, presenting no special peculiarities. In some of them the nuclei are shrunken and occupy only one-half or one-third of the nuclear space leaving clear vacuoloid appearances. I prefer to use the term vacuoloid rather than the more commonly employed vacuole, in so much as we have no certain knowledge of what they are. Their refractive index is the same as that of the medium (styrax), in which they are mounted, and hence may be, in reality, simply vacant spaces filled with the medium. If this were the case one would naturally expect the nucleus to drop out during the processes of preparation when, as was sometimes the case, the shrunken nucleus was entirely surrounded by the clear space. On the other hand the vacuoloid may in reality be cell or nuclear substance in a state of colloid or some other sort of degeneration, the resulting substance acquiring a higher refractive index than that of the normal tissues.

The cells of the *rete* exhibited no evidences of mitosis or other active changes; in this respect being in strong contrast with the appearances observed in a case of psoriasis examined by Schütz (*Archiv. für Derm. u. Syph.*, 1892, S. 739).

Passing still further outward, we observe very distinct and decided changes in the *stratum granulosum*. Instead of finding one, or at most two rows of cells, we observe three, four and at some points even five rows exhibiting their usual dark granular aspect.

Superior to the *stratum granulosum* there is a thick layer of semi-transparent and obscurely nucleated cells occupying the position of the *stratum corneum* (Fig. 2) and strongly suggesting the idea that they indeed constitute a portion of that layer in a condition of pathological change. It is by no means certain, however, that such is the case. Close examination satisfied me, however, that this was improbable, and that a more reasonable explanation of the appearances could be had by assuming undue action and rapid proliferation in the *stratum lucidum*.

This stratum, as its name implies, is not always recognized with facility, on account of its extreme transparency, and the difficulty of obtaining a differential staining.

The importance of this almost invisible layer, however, should not be overlooked. Prof. Schäfer, in his excellent "Essentials of Histology," (Third Ed. 1892), says that: "The nails are

thickenings of the stratum lucidum of the epidermis ;” a view first advanced by Oehl more than twenty years ago. The present writer, however, in 1876, maintained (*Elementary Treatise on Diseases of the Skin*, p. 23), that while the “lucidum” contributed *chiefly* to the structure of the nail, the stratum malpighii and the corneum both contributed somewhat, but in a minor degree, to its composition.

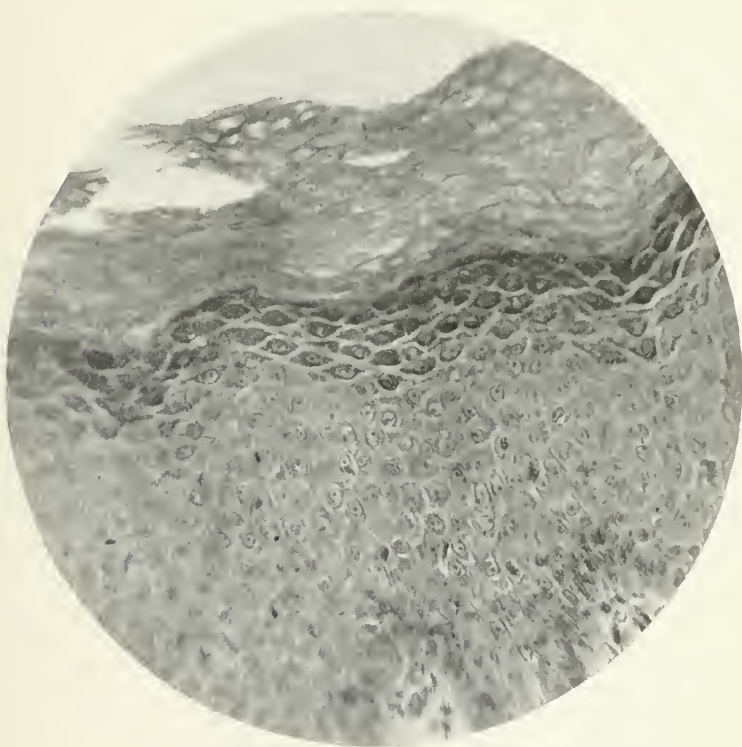


FIG. 2.

PSORIASIS INVETERATA (WALES $\frac{1}{4}$ " x 280).

With these facts in view, therefore, the assumption that the thick stratum of nucleated cells superior to the granulosum was derived from the lucidum, in no sense exceeded the bounds of legitimate pathological hypothesis. In fact, I should be disposed to rest on this explanation, were it not that in one of the sections appearances were found which are quite clearly represented in Fig. 3.

We here note almost complete disappearance of the stratum granulosum, and in its place a stratum composed of many layers of nucleated cells. The nuclei are rod-shaped, resembling the nuclei of unstriated muscle, and differing wholly in appearance from the nuclei of any of the normal epithelial tissues of the skin. It is only at the center of the picture (Fig. 3), that we observe the total disappearance of the cells of the granulosum.

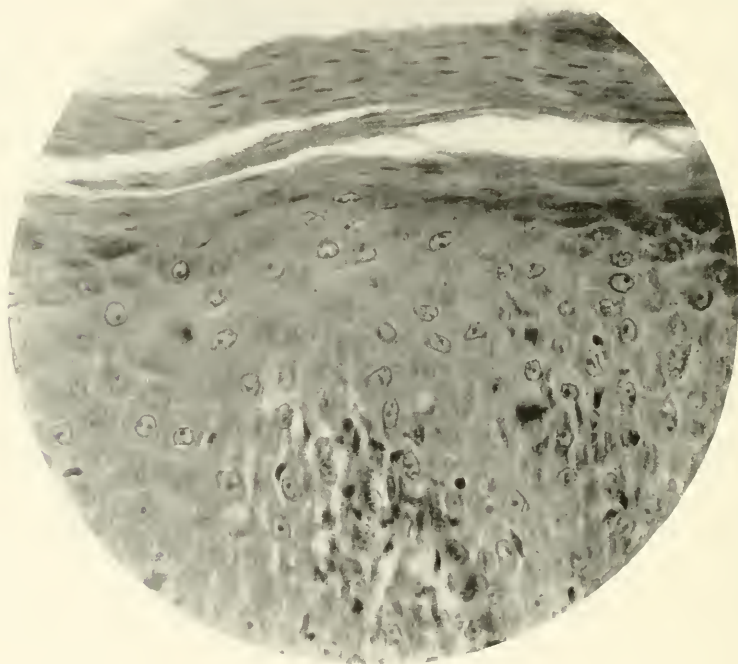


FIG. 3.

PSORIASIS INVETERATA (SPENCER $\frac{1}{6}$ " x 400).

At either side they can be readily distinguished, but still above them lie the layers of rod-nucleated cells. These latter are of necessity derivatives of either the stratum granulosum or the stratum lucidum, but of which, it is by no means easy to decide. My personal conclusion is that they are granulosum cells gone wrong. If we follow these rod-nucleated cells to either side we find that they blend insensibly with the semi-transparent superficial cells shown in Fig. 2.

This is shown diagrammatically in the annexed pen drawings, Figs. 4 and 5, for which I am indebted to the kindness of Dr. Geo. T. Elliot.

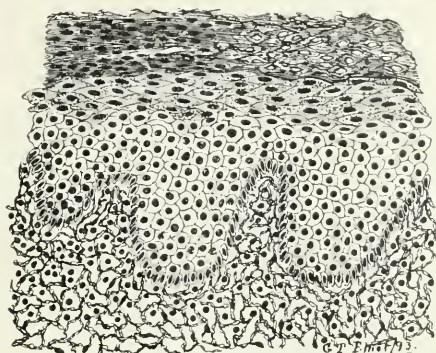


FIG. 4.

PSORIASIS INVETERATA.

In Fig. 4 we see the junction of the rod-nucleated cells with the more open and transparent ones, forming one continuous stratum, while in Fig. 5 the rod-nucleated layer lies between the granulosum proper and the superficial cells, as if it constituted an intermediate state.

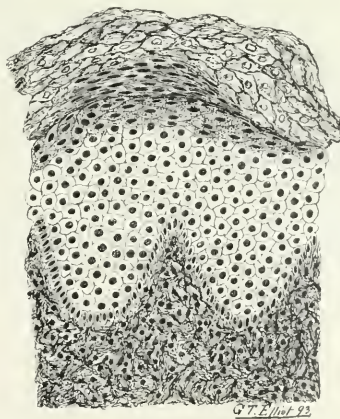


FIG. 5.

PSORIASIS INVETERATA.

This brings us to the further inference that the entire superficial stratum of cells are derivatives of the granulosum. The total absence of cells which could be recognized as belonging to

the stratum corneum is readily accountable through their mechanical removal by the patient with his daily pumice-stone frictions.

The most careful study of the appearances presented in the sections examined, and the logical inductions therefrom, make it evident, almost beyond question, that the stratum granulosum



FIG. 6.

MOLLUSCUM CONTAGIOSUM (GÜNDLACH 1' x 46, REPRINTED FROM A FORMER NUMBER OF THIS JOURNAL).

is the *active* seat of the changes that have been described. The derma and the greatly hypertrophied rete are in a purely *passive* state, exhibiting no evidences of special cell activity.

That the stratum granulosum is very frequently involved in an active manner in many morbid conditions of the skin, is a fact that has not heretofore received from pathologists the at-

tention which it would appear to merit. When, a few months since, I had the pleasure of exhibiting to this Society sections from one of Dr. Savill's cases of eczematoid disease, I specially directed attention to the evidences of activity in the granulosum. In a number of other instances this feature has been met with, and very strikingly in connection with a case of molluscum contagiosum. (See Fig. 6.)

In the section here shown the primary histological changes were unquestionably located in the stratum granulosum. Proliferation of this layer upward resulted in the formation of a considerable mass of ill-formed epithelial cells, constituting the central nodule, and closely resembling in character the superficial cells shown in Fig. 2. In addition to this, and, as I believe, secondary to it, there was a decided circumscribed proliferation of the rete, well shown in the photograph, which went to make up the main bulk of the tumor.

When it is considered that the pathological changes shown in this case of psoriasis were in all probability common to the entire affected surface, the almost hopeless nature of the case, from a therapeutic standpoint, becomes painfully evident. We might possibly—by suitable local applications, control the activity of the granulosum, but the thickened and passive rete forms a barrier through which I see no passage.

REMARKABLE CASE OF CIRCULAR CONSTRICTION OF THE
PENIS IN A BOY, PRODUCING A CONDITION OF ELEPHANTIASIS.

BY

FRANCIS J. SHEPHERD, M.D., C.M.

Surgeon to the Montreal General Hospital, etc.

THE following case is of sufficient rarity and interest to be placed on record.

Gustave R., æt 15, was admitted into the wards of the Montreal General Hospital on September 2d, 1892, suffering from an enormous enlargement of penis and a urethral fistula. His history taken from the case-book is as follows: "At the age of three years had a fall which caused laceration of the under surface of the penis. The urethra was ruptured and the wound took some time to heal. Ever since the accident the boy has passed his water through the torn portion of the urethra which is about one inch from the root of the penis.

His parents say that for some years the dorsum of the organ remained quite normal in appearance but later on the scar tissue about the old wound on the under surface began to grow and gradually encircled the penis causing at the same time an enlargement of its anterior part. During the past year this enlargement has increased much more rapidly and a deep furrow is now produced by the constricting band which gives the penis the appearance of hanging by a thin pedicle."

When I saw him first his penis presented a remarkable condition. The root was normal in size for about an inch, then came a deep furrow with cicatricial tissue at the bottom, this caused a great diminution of the circumference at this point and



formed a pedicle by which hung an enormously enlarged and altered penis. There was, in fact, a condition of elephantiasis, the prepuce being especially enlarged. It looked as if a string had been tied around the organ and had produced this effect. (See cut.)

On passing a sound it was found that the urethra, anterior to the constriction was normal, the sound passed out in front of the cicatrix and could be made to enter the other end of the torn urethra with ease, about half an inch of the urethra being entirely wanting. Micturition was performed without difficulty and no trouble resulted. The boy says he had occasional erections, the large end, which hangs down from the narrow pedicle enlarges, but is quite independent of the root of the penis which tends to assume the erect position.

It is evident that in this case the enlargement of the penis is caused by the gradual growth of scar tissue at the site of the old wound constricting the parts so as to interfere with the proper return of blood. No doubt, at the time of the accident, the cavernous bodies were broken or torn across as well as the spongy portion and urethra. As the anterior portion of penis could never be of any use and was decidedly not ornamental, amputation at the point of constriction was recommended and hopes were held out that the remaining inch of the penis which was normal might develop. This treatment was refused and the boy now occasionally attends as an out patient. It was suggested that the urethra be repaired by a plastic operation, but this course has little to recommend it considering the uselessness of the interior portion of the organ and the character of the tissues to be operated upon.

IS SYPHILIS CAUSED BY ANY KNOWN BACTERIA? ¹

BY

CHAS. G. CURRIER, M.D.

A FRESH impetus was given to efforts toward the discovery of the still unknown "virus" and essential element in the causation of syphilis when Dr. Lustgarten, seven years ago, published his preliminary statement that in syphilitic manifestations, whether very early and highly infectious (such as initial lesions and mucous patches) or very late and non-contagious forms (such as gummata), certain peculiar and distinctly differentiable bacilli were regularly detectable by him; but only when he employed a novel and painstaking coloring method.

Following his exact process with its modifications as detailed in his several publications subsequent to that of November 22d. 1884 (*Wiener Med. Wochenschrift*), very many pathological workers were led to aim at obtaining similar results. His "technique" was varied by some and others devised wholly new methods of staining.

A few were able to declare that they, too, found the same or similar bacilli in the "eruptions" of syphilis, while others (*e.g.*, Doutrelepon) felt confident that they had clear proof of the influence of quite a different bacillus in causing syphilis. The varieties increased with the number of searchers and some, like

¹ The most important recent contribution on the subject is that of Sabouraud, in the *Annales de l'Institut Pasteur*, for 25 Mars, 1892, page 184.

Eve and Lingard, reported that the specific bacillus that they had discovered was easily cultivable upon agar-agar and other usual media of the biological laboratory. Others even declared that their species of bacilli were also cultivable in rabbits and apes and that by inoculating from their agar cultures there were produced, upon these animals, syphilitic skin-eruptions (Disse and Taguchi).

Very little confirmation, however, was produced to support such statements, and soon Cornil, Alvarez and Tavel, Klemperer and others, demonstrated that identically-appearing microbes were found in normal physiological secretions of the human body and also in various skin disorders that clearly were not syphilitic and not on syphilitic subjects.

A more complete list than that given by the familiar thesis of Dr. Fordyce (indicating those who have tried to find the bacilli) would be both tedious and uninformative. While many have put on record their claim to consideration for having discovered bacillary forms, however scanty and infrequent, in some of the syphilitic lesions that they tested, the number is very great of those who made a more or less complete test of the question and whose investigations revealed none of the various "specific" bacilli. From oral communications of skilled microscopists in this country and in Europe, and from perusal of reports of society proceedings (especially in the German journals of several years ago) I am led to believe that very many tests have been made with unvarying negative results, but which the investigator deemed it hardly necessary to publish.

To make my small contribution toward determining which bacillus, if any, seemed so much more prevalent than all others as to merit the designation of "the bacillus of syphilis," I, two years ago, removed from living subjects two initial lesions, four syphilitic papules, two mucous patches, two rupial eruptions, two gummata. These were placed at once in dilute alcohol and, when subsequently hardened in strong alcohol, were imbedded and stained after being cut with a microtome. Sections were similarly tested from one initial lesion and from a papule removed three years previously and which had lain in Müller's fluid and later in alcohol. (I wish here to express my indebtedness to Dr. E. H. Lines for aid in securing part of this material.)

In these attempts, every care was taken to follow minutely the instructions given. The sulphurous acid was freshly prepared and the reagents and dyes were of approved quality; for

they gave excellent results in the detection of tubercle bacilli and of others which at the time were constantly being tested for by the usual methods.

Though I was careful to omit no detail and to deviate in no respect from the authentic technique, the results were negative in so far as regards the determination of the constant presence of a particular and presumably causative micro-organism. Inasmuch as, in all the hundreds of sections, bacilli were observed only three times, and as they were identical in appearance with some of the several hundred kinds of saprophytic and other bacteria known, the bacilli present were regarded as "contaminations" that had no essential connection with the causation of syphilis.

Desiring to see whether, as in other diseased states, especial and distinctive species of bacteria would develop upon culture-media inoculated with secreted fluids and (overlying) broken-down tissues from various syphilitic and non-syphilitic venereal and other lesions presenting themselves in a fresh and untreated state, I (with observance of the usual proper precautions against contamination), introduced such disease-fluids and surface scrapings upon various media. Usually nutrient gelatine or bouillon and, in nearly every instance, agar-agar tubes were employed. From almost every such inoculation a "pure culture" resulted and, as the accompanying table shows, the cluster-coccus of suppuration predominated. Only once did I get a pure culture of bacilli. This case was of an unclean and exposed varicose ulcer and the bacilli were judged to have come from the air or from the unclean garments.

				SIZE.
1889.				
Oct. 19.	Chaneroid,	Staph. pyog.	albus	medium.
1890.				
March 12.	Chaneroids,	on labium, " "	albus	large.
	upon 1 individual,	on cut finger " "	citreus	large.
1889.				
Oct. 17.	Syphilis, initial lesion,	" "	albus	large.
Oct. 24.	Syphilis, initial lesion,	" "	albus	large.
April 19.	Pustular syphilis,	" "	aureus	large.
Oct. 23.	Syphilitic blood, on removal	" "	albus	medium.
	of papule,			
Oct. 19.	Syphilitic blood, on removal	" "	albus	medium.
	of rupial patch,			
Oct. 14.	Abscess of neck (syphilitic),	" "	aureus	small.
Oct. 24.	Syphilitic ulcer of face,	" "	albus	small.
		and a few streptococci.		
Oct. 22.	Syphilitic ulcer of thigh,	Staph. pyog.	aureus	medium.
Oct. 19.	Ulcer of leg (non-syphilitic),	" "	albus	medium.
March 22.	Pustular eczema of face,	" "	aureus	large.
			and albus	

Oct.	22.	Abrasion of skin (non-syph. pus),	Staph. pyog.	aureus	large.
Oct.	19.	Sycosis pustules (non-syph.),	"	albus	medium.
Oct.	22.	Panaritium (streptococci), and	"	albus	small.
Oct.	14.	Panaritium (streptococci), and	"	"	small.
1890.		Four acne cases,	"	albus (2)	small and
			"	aureus (3)	medium.
		Seven impetiginous cases,	"	aureus (5)	small and
			"	albus (3)	medium.
		Four ulcers (varicose),	"	aureus	medium.
				and albus	medium.

Short and thick bacilli, of a familiar grayish-yellow growth occurred twice with the cluster-coccus cultures, but they appeared to have come from without and to have developed in each case from a single bacillus that had got in during the exposure (of the nutrient surface) incident to the introduction of the sterilized platinum wire employed. Three times the inoculation produced both white and yellow cocci together in the same streak-culture upon agar. When the cocci had a diameter of between 0.8 mikron and 1.0 mikron, I designate them as medium-sized. Those outside these dimensions varied considerably in size. Among the cluster-cocci, diplococci were not infrequent as also chain arrangement; yet pure cultures of diplococci did not occur and distinct streptococci were in pure culture seen only in one of the cases of panaritium.

The almost constant bacterial element demonstrable by cultivation as existing on and in the surface of these lesions, as well as in the blood and pus examined, can then be classed as cluster-cocci.

That the blood was not examined oftener was because of the clinical circumstances which rendered it too difficult to secure blood samples antiseptically. Furthermore, the culture experiments were subordinated to the procuring of fresh skin-specimens in which, by staining, to search for the assumptive bacilli of syphilis.

Now, the cocci found by the microscope and by the cultivations were not peculiar when upon syphilitic, but were quite like those detected on the non-syphilitic surfaces. In was, of course, out of the question to aid the determination by resorting to inoculation of these cultures upon healthy human beings; and yet animal inoculations would be of little or no value even if the question were not as to the syphilitic infectiveness of the bacteria growing on the culture-media.

Bockhart and other investigators have found cocci in various skin-disorders; and Prof. Welch, while demonstrating anew the familiar occurrence of pus-cocci on the apparently

cleaned hands of the surgeons and of others whose occupations render them liable to come in contact with such bacteria, has further (*Am. Jour. of the Med. Sciences*, Nov., 1891) called attention to the fact that these cocci, as well as similar ones, can be detected below the surface of the healthy epidermis. It must not be assumed that these bacteria necessarily cause suppuration or other diseased states unless when incited to activity by some "chemotactic" or other irritant. Repeated experiments have shown that suppuration can arise in the absence of any micro-organism cultivable or otherwise demonstrable; and knowledge of the origin of a pus-cocci culture gives no exact and uniform guarantee of the probability or degree of suppuration that is liable to result when these are inoculated into the usual animals employed for testing the quality of such bacteria. Their uniformity, even when from very different sources, and the limitations of our present means of differentiating these micrococci so constantly present, in these pathological states of the skin and other organs, should restrain us from concluding that their presence proves them to be the sole causative agents of the diseased state. It seems not unwarrantable to claim that some virus or viruses, of whose nature we as yet know very little, stimulate them into activity. Thereupon the leucocytes are drawn toward them, not necessarily as a manifestation of any selective, phagocytic activity, but—as explained by Buchner—rather because of chemical attraction due to albuminates in the bacteria.

Thus, the bacteria found in these morbid states may be instrumental in causing suppurative inflammation, yet we still lack sufficient evidence to warrant the assumption that any bacterial or other parasites have ever been proven to be the essential cause of syphilitic infection or of syphilitic disease manifestation.

75 West Fifty-fifth Street.

November, 1891.

NOTE.—This article was written in 1891 and in the keeping of the Editor since that time, as the author expected to be enabled to add the results of further researches in this line of study. As his occupations have not allowed any more definitely conclusive work of this kind, and as this subject has not received any further contribution of importance which could help to solve the question, the paper is published now.

LUPUS VULGARIS FOLLOWING EXPOSURE TO TUBERCULOUS SPUTA.

BY

WILLIAM THOMAS CORLETT, M. D., L.R.C.P., (London.)

Professor of Dermatology in Western Reserve University, Consulting Physician for Diseases of the Skin to Charity Hospital, The City Hospital, etc., Cleveland, Ohio.

MRS. T.—, aged 42, consulted me September 19, 1890, for a disfiguring eruption on the face of several years' duration. She was exceptionally robust, of fine physical development and the mother of three healthy children, the eldest of whom had attained maturity, and excepting the present illness had never been out of health. Further her father and mother came of strong parentage and both lived to old age. There had never been a case of consumption in the family nor other disease worthy of note except an aunt who had what was called a cancer of the breast, which was removed twenty years ago without returning.

Ten years ago the patient was in the habit of making frequent visits to a friend afflicted with tuberculosis of the lungs. It was her custom to hold the phthisical friend on her lap, and on more than one occasion remembers having had mucus coughed in her face.

Some time within the year, before the tuberculous friend died, the patient noticed a small spot on the upper border of the forehead. It was of a reddish color, at first not raised above the surrounding skin, but in a few months it began to ulcerate, new spots appeared in the vicinity and finally the disease invaded nearly the entire face. When the patient came to me for the first time there were five distinct foci of the disease undergoing ulceration, together with a number of papules and infiltrations of a like nature on different parts of the face. The whole surface was greatly disfigured by the cicatrization resulting therefrom. There was no difficulty in recognizing the eruption as lupus vulgaris.

The points worthy of note in this case are first, the origin of the disease, and second, the time of life in which it first appeared.

Since the publications of Virchow and Auspitz, many years ago, when as a foundation for subsequent research they pointed out the resemblance in histological structure between tubercu-

losis and lupus, there followed a growing tendency to regard the two processes as identical. Later Schuller demonstrated microcci in lupus tissue which Neisser did not accept as conclusive, yet predicted that the demonstration of tubercle bacilli in lupus structure was only a matter of time. Koch's inoculations finally settled all doubt as to the presence of tubercle bacilli in lupus structure, so that at the present time a consensus of opinion exists among most dermatologists as to the etiology of the different forms of lupus, and especially of lupus vulgaris.

Nor are clinical data wanting to prove that tuberculosis of internal organs may be inoculated in the skin giving rise to lesions identical in every respect with lupus. White¹ has collected numerous instances in which lupus was presumably due to the inoculation of tuberculous matter, and reports twelve cases that have fallen under his own observation during a period of three years. The most striking report in this connection is that of Dubreuilh, cited by White, in which he collected seventeen cases of tuberculosis of the penis after circumcision, in which the ritual operator was phthisical. It may be further stated that in these lesions of the penis tubercle bacilli were found.

In regard to the age: In this case the disease first made its appearance between thirty-two and thirty-three, while Hebra placed the invasion of lupus at a much earlier period. Rarely, perhaps never, in his extensive observation did it appear after puberty or at an advanced age.² Liveing, in his admirable handbook on the diagnosis of skin diseases, says it makes its first appearance before puberty.³ And so in general it has been customary in making a differential diagnosis to regard the age of thirty as a dividing line beyond which lupus vulgaris seldom if ever appears for the first time.

White in an exhaustive discussion before the American Dermatological Association on the different forms of tuberculosis of the skin, said that no such limitation to the dangers of inoculation exists, and that the skin exhibits such susceptibility both in middle life and at advanced age. Clinical observation, however, teaches that tuberculosis is more prevalent in certain organs of the body at certain periods of life. The child is subject to tuberculosis of the meninges of the brain and spinal cord. In youth the skin offers the least resistance to the devel-

¹ Boston Med. and Surg. Journal, Nov. 12, 1891.

² Hebra on Diseases of the Skin, Vol. IV, 1878.

³ Diagnosis of Skin Diseases, 1878.

opment of tubercle bacilli. While in the adult phthisis pulmonalis is the great scourge of the human race. That tuberculosis does not take place in these structures at other times I do not mean to say, but it is the exception and when it does occur the tendency is to assume a milder, atypical course; as in lupus erythematosus of adult life.

As to the case herein reported, it does not conform to the order of pathology once held: She had passed the age when lupus most frequently appears for the first time. There was no inherited predisposition. There was neither struma, diathesis nor other debilitating cause favoring the development of lupus.

I believe, therefore, it was due to the inoculation of tubercle bacilli from the friend ill of phthisis.

1st. Because the disease appeared at the point of recent exposure to phthisical sputa which is known to contain tubercle bacilli, and which modern research has incontrovertibly demonstrated may be so inoculated and lupus produced.

2d. Because if lupus ever develops spontaneously it occurs early in life.

3d. Because I believe the rule is that lupus is the result of contagion.

FURTHER REPORT ON THE TREATMENT OF GONORRHŒA.¹

BY

W. FRANK GLENN, M. D.,

Nashville, Tenn.

IN September, 1891, when I made my report on the treatment of gonorrhœa with the chloride and iodide of zinc injection, (one-half grain of the chloride and one grain of the iodide to the ounce of water), the point was made that as each case was not examined with the microscope, and gonococci demonstrated, that many or perhaps none of them were cases of specific gonorrhœa, and therefore the treatment might not be as successful as the report would indicate.

I have therefore collected twenty-four cases, all of which were examined by the microscope, and in all of which gonococci were demonstrated.

I will not detain the Association by making a tabulated report of each case, but simply relate the number of days' treat-

¹ Read before the Sixth Annual Meeting of the American Association of Genito-Urinary Surgeons.

ment each case required; making a few remarks on certain cases, which if withdrawn from the list would greatly lessen the average time required for a cure.

The discharge from the urethra in all of the cases was examined by the microscope and gonococci were found to be present. All cases which did not show the presence of the gonococcus have been excluded from the list. The length of time that elapsed from the time treatment began until all evidence of the disease had disappeared, and after which no relapse occurred was as follows: Two in three days, one in four days, two in five days, three in seven days, one in eight days, one in nine days, one in ten days, one in twelve days, one in thirteen days, two in fifteen days, two in seventeen days, one in eighteen days, one in twenty days, one in thirty days, one in thirty-six days, two in forty days, one in fifty-five days.

The average length of time required for a cure was sixteen and seven-twenty-fourth days. In the case that required thirty-six days there was no pain nor inconvenience for the last twenty-five days. There was a drop of whitish discharge in the morning, and about two o'clock in the afternoon, but at no other time. Patient only urinated on rising and at bedtime.

In one case that required forty days, the patient had been suffering for three weeks, and had just recovered from gonorrhœa orchitis when first seen. A considerable portion of the time elapsed before the zinc injection was begun, which had to be suspended one week during a second attack of orchitis. The actual use of the injection being only about twenty days. In the other case requiring forty days, the patient was apparently well on the twelfth day, but had sexual intercourse that night which set up considerable inflammation, requiring twenty-eight days longer to completely remove it. The case requiring fifty-five days had naturally a very small urethra, would admit no larger instrument at any point than a No. 11 American Scale. I irrigated three times and applied nitrate of silver (five per cent. solution), to deep urethra before patient recovered. While I regard the average in all the cases as very gratifying if these few cases should be withdrawn from the list, the average would be reduced to eleven and seventeen-twentieth days. Of course in many cases injecting in the ordinary way by the patient will not be sufficient. but in the great majority of cases even this method will afford a more speedy relief than any other treatment, and in the small per cent. of cases that are difficult to cure (requiring thirty or forty days), there is seldom anything

to annoy the patient after the first five or ten day, save a slight discharge. The frequent micturition, ardor urinæ and excessive discharge yield very rapidly. If injecting in the ordinary manner does not cause rapid improvement the urethra should be thoroughly irrigated with hot water, and then with the zinc injection once in twenty-four hours.

Society Transactions.

THE NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY, JANUARY 10, 1893.

DR. E. L. KEYES, *in the Chair*.

The following officers were elected for the ensuing year :

Chairman, Dr. Samuel Alexander.

Secretary, Dr. James R. Hayden.

Some Mistakes in the Use of Intra-Vesical Injections in the Treatment of the Cystites of Prostatics.—DR. SAMUEL ALEXANDER read a paper on this subject.

He stated that it was not his intention to discuss generally the subject of intra-vesical injections and irrigation in the treatment of the cystites, nor to consider the relative value of any of the numerous remedies which have been recommended. Nor did he desire to advocate the use of any new injection. The value of vesical injections in the treatment of the cystites is very generally recognized, but authorities differ as to the conditions under which this mode of treatment is indicated. Dr. Alexander said that although he was convinced of the great benefit to be derived from the proper use of injections, he is equally certain that there are many cases in which injections are used that are cured not by this mode of treatment, but in spite of it. He has been led to believe that the misuse of this method of treatment is due to an imperfect knowledge of the physiology, the pathology and the pathological anatomy of inflammation of the bladder. Recent investigation has thrown a great deal of light upon many questions relating to these subjects which were formerly obscure. The normal bladder has very little sensibility to contact. The normal capacity of the healthy bladder is the amount of fluid it will contain without producing the desire to micturate. When this amount is exceeded, the bladder contracts, and it is this contraction that causes the desire to pass water. The latter sensation occurs simultaneously with the contraction of the bladder. It is not due to the entrance of urine into the urethra, but to the contraction of the bladder. At the same time, there is a sensation produced in the membranous urethra and in the anterior portion of the prostatic urethra when it is stimulated, but that is not primarily the cause of the desire to pass water. It is due to the contraction of the bladder wall. The intensity of the desire is in proportion to the amount of the contraction. When the bladder contracts, the physiological congestion of its walls is increased; every contraction of the muscular fibres causes an increased flow of blood to the parts.

In the inflamed bladder the sensibility is increased both as to tension and to contact. A metal or soft catheter causes pain when it is brought into contact with the inflamed mucous membrane. Whenever we find an increase in the amount of blood—that is, a hyperæmia or congestion of the bladder wall—we also find that the irritability of the bladder is proportionately increased. Distention of the inflamed bladder beyond its capacity causes a violent and painful desire to pass water.

Intra-vesical injections, as customarily used in the treatment of the cystites, can be divided into four classes: First, cleansing injections, as, for example, sterilized hot water, boric acid or borax solutions, Thiersch's solution, etc.; second, antiseptic solutions, such as Thiersch's, bichloride of mercury, borax, etc.; third, stimulating or astringent solutions, as, for example, silver nitrate or sulphate of zinc; fourth, soothing or anæsthetic injections, such as those of cocaine or opium. Some of these injections are used for a double purpose, as, for example, Thiersch's solution, which is both antiseptic and cleansing.

Intra-vesical injections, Dr. Alexander said, may do harm, first, by increasing the local congestion of the parts. (a) The normal sensibility of the bladder being a sensibility to tension, and this being intensified when there is cystitis, an injection which causes pain or produces a desire to pass water by distending the bladder increases the inflammation, and this is especially true and much more likely to occur when the injections are repeated frequently. It may, therefore, be stated as a general principle that in any of the cystites where the tension sensibility of the bladder is very acute, and the capacity of the bladder greatly diminished, intra-vesical injections are absolutely contra-indicated. (b) Although the normal bladder has little contact sensibility, its sensibility to irritating fluids is very acute, and this latter is intensified in nearly all cases of cystitis. Strong injections, therefore, such as the bichloride of mercury solution, may increase the inflammation by causing congestion. The simple contact of the fluid, especially in cases where the sensibility to tension is intensified, causes violent contractions of the detrusor muscle. The vesical spasm which sometimes remains after an injection should be regarded as a contra-indication. Second, the dangers from the use of non-sterilized injections and from the disregard of aseptic precautions in performing the operation are self-evident. The same may be said in regard to the dangers from traumatism produced by the rough use of the catheter.

The use of soothing injections, and of those intended to produce a local anæsthesia of the bladder, is very general. It is, however, based on a false idea of the physiology of the bladder. The injections commonly employed for this purpose are those of cocaine and those which contain opium in some form. Such injections, the speaker said, he believes are of no practical value. He does not include in this the use of cocaine in the normal bladder, or where examinations are to be made, or operations are to be performed, because it is well known that cocaine solutions will temporarily blunt the sensibility of the bladder. Under no circumstances, however, should these injections be used in the cystites of prostatics as a mode of treatment. The pain in cystitis is not due to the contact of the urine, but to an increase in the tension sensibility of the bladder, and the same is true in regard to frequent micturition. To anæsthetize the inner surface of the bladder, therefore, has no effect upon the pain or frequency. On the con-

trary, the use of such injections is likely to increase these symptoms. Their effect, at the best, is but temporary, and the frequency with which the bladder has to be distended when this mode of treatment is employed defeats the very object which they were designed to accomplish. It may be stated generally, that in the majority of cases in which soothing or anæsthetic injections are used, intra-vesical injections of all kinds are contra-indicated.

In the cystitis of prostatitis, with partial retention and ammoniacal decomposition of urine, injections are most serviceable, but here, too, they are most likely to do harm when improperly used. The ammoniacal decomposition of the urine is due to four factors, namely: (1) to certain microbes which are pyogenic in the bladder; (2) to stagnation of urine; (3) to the presence of pus; (4) to the condition of the urine—that is, when the urine contains a certain amount of urea. When we use injections in these cases of cystitis with prostatic enlargement, we have to take something more into consideration than the presence of the microbes. The decomposition of the urine is favored by the amount of pus and urea in the urine. The heavier the urine, the more readily it will decompose. The more pus it contains, the more rapidly will decomposition occur. The other elements of decomposition, namely, the microbes and the stagnation of the fluid, are to a certain extent of secondary importance, although the number of microbes is an important element in the rapidity with which the ammoniacal decompositions occur. In such cases, where the injection causes pain and the desire to urinate, it is contra-indicated. Just here error is often committed, and many practitioners continue to wash the bladder and change from one injection to another, and hope for good results in spite of the fact that their injection causes pain every time. Another point in connection with the relief of the retention is the carelessness with which the urine is often withdrawn from the bladder by many good surgeons, causing infection and re-infection of the organ. It is important not only that the catheter should be sterile, but also that the urethra, as far as possible, should be thoroughly cleansed; with this object in view, the anterior urethra should be irrigated with the retro-irrigation catheter—preferably the glass catheter.

Dr. Alexander said that he believed the treatment *par excellence* for ammoniacal decomposition is the dilution of the urine. The more dilute the urine, the less likely is it to undergo ammoniacal decomposition. The ingestion of large quantities of fluids are indicated in these cases. The internal administration of certain antiseptics, such as naphthalin and the oil of wintergreen, are also to be recommended. The pus in the urine will take care of itself, if you prevent the entrance of microbes into the bladder by irrigation of the urethra and by evacuation of the urine, until a time when it becomes proper for you to employ stimulating or astringent injections in order to treat the local lesions of the bladder.

In conclusion, Dr. Alexander made the following statements :

1st. All intra-vesical injections are contra-indicated in cases of the cystitis of prostatitis where the inflammation is so acute that it is impossible to wash the bladder or to inject sufficient fluid to wash it without causing pain or an increased desire to pass water.

2d. Local anæsthetics in the bladder are harmful, because they cause congestion in the cases in which they are employed.

3d. That in cases of ammoniacal decomposition of the urine, associated with the cystitis of prostatitis in which there is acute congestion—that is,

acute inflammation—and in which the tension sensibility and the contact sensibility are so much increased by an injection as to cause pain and an intense desire to pass water, it is far better to simply empty the bladder at proper intervals, under aseptic rules, to use diluents and antiseptics internally, and to postpone the washing until the bladder gets into a condition wherein the above symptoms will not ensue.

DR. R. W. TAYLOR said that the pathology of the bladder, as given by Dr. Alexander, was fully in accord with the investigations recently made in Paris. The habitual use of cocaine in the bladder is highly injurious there, as elsewhere, resulting in hyperæmia and congestion, as it does in the nose, throat, etc. He agreed with Dr. Alexander that the internal use of certain antiseptics, such as salol, oil of wintergreen and salicylate of soda, are often of much benefit in these cases of cystitis, but we must not go to the other extreme and entirely neglect other methods of treatment. He has seen much relief follow the use of injections of very weak solutions of carbolic acid (one-fifth of one per cent.), or of borax or boric acid, only injecting a small quantity of the fluid, and thus inducing an increased degree of tolerance and capacity of the bladder.

DR. GEORGE E. BREWER emphasized the importance of keeping the catheter sterile and washing out the urethra. Many cases of septic infection of the bladder and kidneys no doubt have their origin in the use of dirty instruments. In chronic cases, who have become accustomed to catheter life and draw off their urine at regular intervals, the dangers of septic infection are slight.

DR. EUGENE FULLER said he did not consider it practical to instruct old prostatic patients to wash out the anterior urethra. The surgeon would have to superintend it, as these old patients are usually so tremulous that they could not do it themselves.

DR. HERMANN G. KLOTZ said that washing out the anterior urethra would not entirely obviate the danger of carrying infection into the bladder; infectious material is more likely to be carried up from the posterior urethra. Dr. Klotz also referred to the benefit to be derived from washing the bladder with permanganate of potash solution, 1 to 2,000. It does not cause any deposits, which is an important point.

DR. E. L. KEYES referred to Dr. Alexander's statements about the physiology of the bladder. It appeared to him that the desire to urinate is not entirely due to the contraction of the bladder wall, for the reason that although a moderate contraction of the detrusor muscle is necessary, yet that action is simultaneous with the passage of the first drop of urine into the prostatic sinus. The feeling of the desire to pass water must reside in the deep urethra, and not in the contraction of the bladder wall. On the passage of an instrument into the healthy urethra, when the instrument enters the membranous urethra or becomes fairly engaged there, the patient feels an inclination to pass water. When there is cystitis about the neck of the bladder, pressure upon that part of the urethra will create a desire to pass water. On the other hand, you can pick up the bladder in some cases and squeeze it to a certain extent, and it does not create a desire to urinate, although it certainly produces a contraction of the detrusor muscle. In the ordinary cases of cystitis which we meet with every day, the inflammation is often confined to the region about the neck, and an injection will cause pain to arise from this sensitive area, or it may be due to mechanical injury

following the passage of the catheter. Dr. Keyes agreed with Dr. Alexander that in cases where the pain is intensified by the injection, that is a contra-indication. That the persistent use of anodyne injections is harmful—or at least of no benefit—is undoubtedly true. In ammoniacal decomposition of the urine, the diluents hold a very high place, and their use is only attended with one objection—that is, in cases of painful cystites, where the bladder is small and tender, the too free use of diluents is apt to tease the bladder and increase the grade of congestion.

DR. ALEXANDER, in closing the discussion, said that unless there is a contraction of the detrusor muscle, you do not have the desire to pass water. It is therefore proper to say that the desire to pass water is due to the contraction of this muscle. Owing to the distribution of the nerves in this region, such a contraction may give rise to pain or a desire to urinate, which is referred to the membranous urethra or prostatic sinus, just as a stone in the bladder may give rise to pain which is referred to the end of the penis.

NEW YORK DERMATOLOGICAL SOCIETY.

221ST REGULAR MEETING.

DR. ELLIOT, *President, in the Chair.*

Case for Diagnosis.—DR. BRONSON presented a case of scalp disease in a girl 5 years of age. The patient had been under observation for about a month at the Babies' Hospital. The previous history was unknown. When first seen in the hospital nearly the whole top of the head was denuded of hair, the scalp was reddened, smooth and bound down as though cicatricial. At the borders the hairs grew in tufts, with bare spaces extending into the region lower down. At the sides and back the growth was for the most part normal. Around the central area of alopecia there were numerous projecting nodules, many of them as large as hazel nuts. Some of them felt soft and fluctuating, but on being incised nothing but blood escaped. Some of the lumps were hard, as though cicatricial. The general appearances suggested favus in the atrophic stage, though no scutula were seen, and microscopic examination failed to discover any spores whatever. The cervical glands, especially in the nape, were markedly enlarged and very hard. The hairs seemed firmly imbedded and were neither split nor broken. Under treatment, the appearances had improved. The nodular indurations had diminished, and a fine growth of hair was beginning to appear upon the previously bald area.

DR. FOX considered the case one of chronic ringworm. The absence of any spores, he thought, was due to the intense inflammation or to the falling out of the hair over the entire affected area. The condition of the skin did not look like favus; such a red color of the skin was often produced in the kerionic form of ringworm.

DR. JACKSON thought the case looked like an old favus. He would like to leave the case without treatment for two or three weeks before making a diagnosis.

DR. SHERWELL thought the case was one probably of kerion, as Dr. Fox had said, but it was of unusual extent, an unusual baldness, the islets of hair being less numerous. He did not consider, either from its clinical history or from its present appearance, that it was either the disease described by Quinquaud and others, or even analogous.

DR. ELLIOT considered the case one of kerion Celsi. In examining the case this evening, he found the hair breaking off very easily. The absence of the trichophyton at such a late date in the process he would not consider as against the diagnosis, as under the influence of suppuration he had frequently observed that it was extremely difficult, and sometimes impossible, to find spores or mycelia. He could not think of Quinquaud's folliculite décalvante, which is an affection beginning in early childhood, of slow and gradual course, appearing in smaller disseminated patches, rather than so diffusely, uniformly and acutely, as in the present case.

DR. BRONSON was disposed to admit that the disease was of parasitic origin, though no parasites could be found. The appearances were not those of ordinary kerion, though they may have been different before the patient was admitted to the hospital. The involvement of the lymphatics would imply that there had been considerable suppuration.

DR. FOX pointed out the presence of small tumors when he saw the case once before.

Case of Mycosis Fungoides.—DR. FOX presented a woman, 28 years of age, affected with this disease.

DR. SHERWELL believed the case to be one of mycosis fungoides, partly from the stress laid upon the difficulty of diagnosis by the gentleman who presented the case, partly from its innate resemblance, in its macroscopical appearance, to two cases he had seen in practice, one of which afterwards came into Dr. Morrow's hands, the history, and for awhile the appearance, were identical.

DR. KLOTZ also considered the case as one of mycosis fungoides, principally on the strength of its resemblance to a case presented before the Society by Dr. Fox about two years ago.

DR. BRONSON had previously seen the case, and agreed with the diagnosis of mycosis fungoides, although he doubted whether he would have made that diagnosis at the start, had it not been suggested to him. The eruption seemed to follow the course of the lymphatic vessels. He mentioned a case of the same disease, which he had under observation in the City Hospital, where there was the same eczematous condition of the skin at first, bearing a remarkable similarity to eczema rubrum. But, besides this, there was an enormous ulcerated place on the side, from which a large fungating mass projected, and also numerous smaller purplish tumors of various size, with partly eroded or incrustated surfaces on other parts of the body. He intended to report on the case more fully at another time. He had used fuchsin with good effects on the ulcer, so that it was almost healed.

DR. FOX recalled the case which he had presented two years ago, who had shown the same eczematous, sharply defined condition and also pigmented spots. As he had predicted then, soon tumors began to appear which almost covered the entire body, and the man died after about eighteen months. The nature of the tumor which had been removed from the

breast of the woman could not be ascertained. She was treated with large doses of cod liver oil. Arsenic had not any effect at all in the former case.

Case of Lupus Erythematosus.—DR. BRONSON presented an elderly woman with this disease, which had formerly been under the treatment of Professor Besnier. The case was interesting on account of the multiplicity of the patches and the neurotic symptoms (stinging pain) which accompanied recurrent exacerbations of the disease. The patches are seated on the face, neck and arm. He regarded the case as one of the disseminated variety described by Kaposi. He had used thilamin on the recent recommendation of Dr. Fox; it had at first promised good results, but subsequently lost its effects. *Emplastrum hydrargyri* seemed to act better than anything else.

DR. JACKSON would advise the application of Dr. Cutler's combination of chloral, carbolic acid and iodine.

DR. FOX advised the continuance of thilamin on one single patch, while on the others should be continued the mercury plaster, since he again had become convinced of the good effects of the drug in lupus erythematosus.

DR. ELLIOT thought that there was much importance in the presence of the neurotic element mentioned by Dr. Bronson. Possibly lupus erythematosus was a process of neurotic origin, and its study from that point of view was certainly advisable. The spontaneous disappearance of the lesions and the apparent changes taking place in them, according to the condition of the nervous functions of the patient, which had been observed, spoke in favor of this theory. The presence in a tubercular subject would not demonstrate that it was itself tubercular, especially as the most extensive and careful researches had failed to show the tubercle bacillus in connection with it. That it was produced by other micro-organisms has likewise not yet been shown, and it would appear to him that the disease was worthy of being studied from other points of view than the parasitic theory, to which there is so much tendency to-day to ascribe disease in general.

DR. BRONSON regarded the neurotic element of the greatest interest. Perhaps there might be cases of parasitic and of neurotic origin, and two different forms of lupus erythematosus, as there were of alopecia areata. The effects of thilamin were only passing, although one spot healed under its application. He would, however, try Dr. Cutler's remedy.

DR. LEWIS spoke very favorably of another remedy which he tried on a case of lupus erythematosus, and which, in a single case, had given him better results than any other remedy—aristol in flexible collodion (1—30).

DR. ELLIOT thought the beneficial effects of phosphorus (Thomson's solution), which he had personally observed, might be due to the neurotic character of the disease. In some cases, as is well known, all the lesions disappear without any treatment, but still he had seen most material improvement from the phosphorus take place in a few weeks.

DR. LUSTGARTEN asked whether Dr. Elliot had seen a permanent cure from phosphorus?

DR. ELLIOT stated that he had not had the case long enough under the influence of phosphorus to obtain an entire cure.

Case of Syphilis of the Tongue.—DR. S. ALEXANDER presented a young man about 30 years of age. Had primary lesion eight years ago. Treatment was immediately begun, and the only symptoms of the disease to appear after the chancre were a few anal condylomata. The treatment was

kept up intermittingly for one year, and then stopped. Two years ago the tongue began to crack, and white patches appeared upon the surface: there were at times patches of superficial ulceration. The patient came under Dr. Alexander's care last summer. The tongue was then in about its present state. The papillæ are very large and prominent, the surface is cracked and seamed, especially upon the right side. It becomes painful at times, and patches of erosion appear. Smoking and hot or highly seasoned food increase the pain.

Mercury and the iodides have been used alone and in combination, both having been pushed to the limits of tolerance, but without effect. Local treatment of various kinds, including the acid nitrate of mercury, has been used without benefit.

DR. ALLEN did not doubt the syphilitic nature of the affection. He considers it most likely that a gummatous infiltration was formed at first, which subsequently by resolution permitted the fissures to form, in which papillomatous new growths may take their origin and gradually fill up the fissures, as seen in a recent case of his own.

DR. BRONSON thought the affection a syphilitic one, principally on account of its restriction to a single spot; disease from other causes being likely to attack other portions, and changing their seat.

DR. SHERWELL believes the condition of the tongue to be syphilitic beyond doubt; he has such a case, similar, or somewhat worse, in the person of a gentleman from northern Massachusetts, who comes to him every month or two with recurrences, which, when treated both by specific internal treatment, and with moderately diluted hydrarg. nitrat. locally, get well; but on stopping medication, and from other causes, as smoking, will reappear.

DR. KLOTZ considered the affection as a syphilitic one, notwithstanding the rigidity and resistency of the tissue. He had observed a number of similar cases; in one the warty masses remained stationary for years. The patient went to Aix-la-Chapelle for treatment, and there everything disappeared; but soon after his return the tongue got bad again.

DR. FOX did not see anything characteristic of syphilis in the lesions, and did not consider them a symptom of syphilis, but due to other irritation, smoking, and disorder of the stomach from drinking, etc., being their cause.

DR. KLOTZ said that he agreed with Dr. Fox so far, that he believed the lesions could not be cured unless smoking and drinking were given up. But such lesions would never occur in a patient who was not syphilitic. He did not believe that a cure would be effected by general treatment without local applications. The tongue affections were as rebellious as the late affections of the palms and soles.

DR. ELLIOT agreed with Dr. Bronson that the stationary nature of the lesions spoke in favor of their syphilitic nature. Glossitis of other origin would most probably move from place to place; would vary from time to time materially in extent and in appearance. He did not believe in the efficiency of internal treatment in such cases, but inunctions were more likely to cure them. Locally, he would employ the Paquelin cautery.

DR. ALEXANDER, in reply to Drs. Allen and Sherwell said, that he did not think the condition of the tongue was the result of a gumma, although it was undoubtedly syphilitic. He had seen several similar cases to the one presented, but had never seen much permanent benefit from local treatment.

Case of So-Called Colloid Milium of the Face.—DR. FOX presented a case of this affection.¹

DR. ELLIOT stated that he had examined sections from this case under the microscope, and had not found any signs of colloid degeneration in the skin. He therefore would not entertain the idea of colloid nature of the affection. The microscope, on the contrary, showed changes seen in tuberculosis; there were very many giant cells, closely aggregated and constituting a nodule surrounded by a wall of small round infiltration cells. Examination for bacilli had not been made. The case greatly resembled one of follicular lupus, which he had presented to the Society some years ago, and which had been cured, with but a few slight recurrences, by the application of nitrate of silver. In this case the microscope had shown the tubercular nature of the process; the patient was of tuberculous stock, and the affection had begun while she was nursing a tuberculous relative. He considered Dr. Fox's case identical with his own.

DR. FOX stated that he looked upon the case purely from the clinical standpoint. The contents of the small tumors were of a gelatinous nature, and clinically, particularly on the eyelids and some other localities, they closely resembled colloid disease. The spontaneous disappearance seemed to strengthen this belief. Lupus would hardly disappear spontaneously, but rather show a tendency to spread in the neighborhood.

DR. ELLIOT added that a case of follicular lupus had been published by Unna, several years ago, under the name of lupus miliaris, and several cases by British authors. He would repeat that he had found in Dr. Fox's case tubercular, but no trace of colloid tissue, or of colloid metamorphosis.

Case of Rhinoscleroma.—DR. JACKSON presented the case mentioned at the last meeting.

DR. ALLEN said he had expected to present this patient over a year ago, and when she failed to appear at the meeting had shown a photograph of the case, kindly taken by Dr. Piffard. At that time attempts to produce cultures had been made in conjunction with Dr. Lustgarten, but they had failed.

DR. LUSTGARTEN stated that he had not been successful in getting any cultures from this case. While in Vienna he had always succeeded with ease. He therefore was somewhat doubtful that this really was a case of rhinoscleroma.

DR. BRONSON said that this was the first case of this disease which he had ever seen in America.

DR. JACKSON said that he was very sorry he could not get any specimens from the patient, who objected to all interference.

Case of Erythema Circumscriptum Planum et Papillare in Morbo Cæruleo.—DR. LUSTGARTEN presented a male child six years of age with a congenital vitium cordis, probably stenosis of the pulmonary ostium. He called attention to a number of red, slightly elevated spots, some of a papillary character, with minute hemorrhages on the face as well as on the body. He believes that this condition is due to paralysis of the papillary blood-vessels which permitted diapedesis of the blood corpuscles. The irritation produced by chemical changes of the latter may have given rise to the pap-

¹ See February issue of this JOURNAL.

illary hypertrophies. Some places showed a certain resemblance to lesions of angiokeratoma as described by Pringle, Mibelli and others. Dr. Lustgarten showed a picture of lesions of angiokeratoma of the hand, of a case of his own from the year 1886.

DR. CUTLER was greatly interested in the case, as he had noticed similar lesions on the face of several patients with morbus cæruleus. He thought that there probably was pulmonary stenosis present in this case.

DR. KLOTZ thought that the erythematous spots might be due in the first line to hemorrhages which occurred during sudden exertions of the patient.

DR. ELLIOT did not believe that there was sufficient keratomatous condition present in any of the lesions, to speak in the strict sense, of angiokeratoma in this case, nor could he find any resemblance in its lesions to angiokeratoma.

DR. LUSTGARTEN stated that he thought paralysis of capillary blood vessels was the cause of these patches of erythema as well as in angiokeratoma, the provoking cause being different, cold in the former, heart trouble in his case. He was sure that a slight papillary formation was present in some of the patches. He thought that the most extreme condition of his case and early conditions of angiokeratoma could resemble each other very much.

Case of Exfoliatio Areata Linguae.—DR. ALLEN presented a young woman with exfoliatio areata linguae, such as is frequently seen in children, but rather rare in the adult, and which Parrot wrongly claimed was due to hereditary syphilis. The patient was the subject of lupus now about cured by scarification.

During the evening DR. PIFFARD exhibited a number of sections from Dr. Savill of London, demonstrating epidemic eczematoid disease, and of scabies crustosa from Drs. Brayton and Hessler of Indianapolis. In Dr. Savill's section Dr. Piffard had been able to demonstrate besides the changes mentioned by Dr. Savill, neuclear degeneration of the rete and great activity in the stratum granulosum.

Correspondence.

THE HISTOLOGY OF PRICKLY HEAT.

To the Editor of the JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES :

In the February number of the JOURNAL, in an article upon prickly heat, the author, Dr. Pollitzer, states that the anatomy of this disease has never been studied by any one with the microscope until he studied it last summer, and, consequently, he regards his paper as the first upon the subject. If the writer had consulted Vol. II, 1884, p. 362, of the JOURNAL, he would have learned that I read a paper in 1884 before the American Dermatological Association upon this subject, as well as upon sudamen and a special form of retention of sweat within the excretory sweat duct lying within the corium, and seen especially in washerwomen of mature years, the

paper being based almost entirely upon microscopical studies. The subject was discussed at length by several members of the Association, and the sections exhibited were examined with the microscope. Thus more than eight years ago an effort was made by the writer to settle the then existing diverse views upon *miliaria alba et rubra*, *eczema solare*, *lichen tropicus*, prickly heat, *sudamina*, etc.

A. R. ROBINSON.

248 West Forty-second Street.

Book Review.

A System of Genito-Urinary Diseases, Syphilology and Dermatology. By Various Authors. Edited by PRINCE A. MORROW, A. M., M.D., Clinical Professor of Genito-Urinary Diseases, formerly Lecturer on Dermatology in the University of the City of New York, etc. With illustrations. In three volumes. Vol. I, Genito-Urinary Diseases. New York: D. Appleton & Co., 1893. Pp. xxvii.—1,074.

The Editor has very truly stated, in his preface, that the field of research in every department of medicine has become so vast that it is almost impossible for any one individual to carefully sift from the mass of accumulating new material those facts and opinions that represent a distinct advance in our knowledge, and that have definite and permanent value. Accordingly, a number of specialists have been selected with particular reference to their qualifications for preparing papers upon the subjects individually assigned, and this first volume presents the results of their labors in the subjects pertaining to genito-urinary diseases.

The first section in this volume is devoted to the anatomy and physiology of the genito-urinary organs, presenting the subject in as brief and concise a manner as is possible.

The second section treats of the diseases of the penis, premising with reference to such abnormalities as absence of the penis, rudimentary, concealed, multiple, deformed, undersized and oversized penis. Wounds, fractures and dislocations of the penis are appropriately referred to. The cutaneous and lymphangitic affections of the organ, with the methods of treatment, are described. In his description of circumcision, the author, Dr. Ramon Guiteras, assumes that the operator will carefully cleanse the prepuce externally and internally, an essential to secure union by first intention; he properly condemns the administration of ether for this operation, and advises bandaging the penis to secure a bloodless operation, although we have found that an ordinary rubber band may be more conveniently and as efficaciously placed about the organ. The best circumcisions may be performed with a grooved director, a pair of surgical scissors and a suture and needle, especial clamps and forceps being needless luxuries. The various diseases of the glands and prepuce, and the corpora cavernosa, are succinctly described.

Dr. F. Tilden Brown premises his description of the diseases and injuries of the urethra by reference to the malformations of the urethra. The author prefers Duplay's operation for the cure of hypospadias and Thiersch's for the cure of epispadias.

We cannot commend too highly the care with which this author has described the technique of urethral examination for the detection and treatment of urethral ulcer and erosion. The section on rupture of the urethra is carefully written, and the author advises the sole rational procedure in such cases, perineal section at an early date.

The etiology of urethritis is from the pen of Dr. S. Lustgarten. He refers to the several fictitious micro-organisms described as causing gonorrhœa, previous to Neisser's discovery of the gonococcus. Bumm's, Wertheim's and Gebhard's studies of the methods of cultivating this organism, and their demonstration of its infectious character, are described, as are the methods for staining this coccus. Brief references are made to the various urethral discharges other than gonorrhœal.

Dr. George Emerson Brewer has written the chapter on acute gonorrhœal urethritis with its complications of posteria urethritis, epididymitis, folliculitis, cowperitis, prostatitis, vesiculitis, cystitis, pyelitis and balanitis. The various phases of these conditions, as well as the methods of treatment to be employed for their relief, are carefully described, and this section represents the latest information regarding this important and omnipresent disease.

The section on chronic gonorrhœa or gleet is written by Dr. W. K. Otis. He urges the desirability of employing urethral dilatation as soon as the subacute stage occurs, and to accomplish this the meatus is to be incised; an operation that seems to us to be needless to accomplish the former purpose, besides leaving a flaccid large meatus that serves to direct the flow of urine in the same manner the open end of a hose guides water. We believe also that such an instrument as F. Tilden Brown's urethral speculum has the same advantages over the ordinary endoscope, that a bivalve or fenestrated speculum has over the old-fashioned cylindrical vaginal or rectal speculum.

This latter matter is referred to in the following section on endoscopy, by Dr. H. G. Klotz, who advocates the tubular speculum, stating that "the perspective sidelong view of an extended stretch of mucous membrane does not give distinct pictures." This does not seem to be a tenable position for the same thing occurs in using rectal or vaginal speculums, and yet, experience is acquired in recognizing the conditions displayed by their employment and we do not believe that the profession would willingly resort to the absolute form. So, too, with the endoscope, the pictures given to beginners by using either instrument are very indistinct, and the eye must be educated to recognize the significance of what it sees. Dr. Klotz has presented his wide experience in an attractive and scientific manner.

Dr. Joseph A. Andrews has written a chapter on gonorrhœal ophthalmia that is a model of scientific directness and thoroughness, epitomizing, as it does, his wide experience as an ophthalmologist.

The chapter on gonorrhœal rheumatism is by Dr. Frank Hartley. He considers the topic under the usual headings, dividing the form in which the disease presents itself into an acute or chronic monarticular or polyarticular gonorrhœal rheumatism. This author believes that in the light of present evidence gonorrhœal rheumatism is due to a mixed infection, and he is compelled to leave it as one of the *opprobria medicorum* as far as remedial treatment is concerned.

Dr. James P. Tuttle has prepared a very interesting paper on gonorrhœa

of the rectum, nose, mouth, ear, umbilicus and axilla. This author finds no evidence to support the idea that the last three localities are subject to gonorrhœa, but cites a number of instances in which the first three were proved to be infected by the demonstration of the gonococcus in the sections from these regions.

The section on stricture of the urethra is by Dr. J. William White. He refers to the published literature on congenital stricture, stating that personally he is unfamiliar with authentic cases, and he deprecates the unnecessary frequency and freedom of incisions for narrowings of the meatus; an operation that produces an artificial balanic hypospadias with diminished ejaculatory power. The administration of antiseptic medication for some days previous to the performance of catheterism or urethrotomy is advised in all cases. Dr. White carefully considers the various features *pro* and *con* regarding the treatment of urethral stricture by gradual dilatation, and he agrees with Mr. Harrison in considering that the examination of many cases is not favorable either to the permanency or the character of the relief that internal urethrotomy usually affords. He states that: "Divulsion is so clumsy, so uncertain, and so dangerous as to have to-day almost no advocates, and to enter into an argument against it is, therefore, in my opinion, a waste of time;" and with this dictum no experienced surgeon can disagree. That the operation of internal urethrotomy should only be employed in those cases in which the patient refuses to have the external operation performed, is a widely entertained opinion; but one that seems to us to be too sweeping, even as herein applied to strictures of large calibre of the pendulous and deep urethra. Dr. White doubts the frequent production of deep urethral spasm as a result of the so-called anterior stricture of large calibre, either at the meatus or elsewhere; and he considers that external urethrotomy may possibly, but extremely rarely, cure deep stricture. He commends the combined internal and external urethrotomy in the treatment of strictures of the last mentioned class. The entire chapter evidences careful study of the various results obtained in the author's wide surgical experience.

The chapter on diseases of the prostate is by Dr. W. T. Belfield, and we are glad to see the emphasis that he places upon the importance of gradual dilatation of the prostate when hypertrophied. When this latter condition comes under the surgeon's observation too late to render dilatation available, recourse must be had to one of the four modes of operation: by the urethra; by perineal incision; by suprapubic cystotomy, or by the last two operations combined.

Dr. Joseph D. Bryant has prepared an interesting section on the functional disorders of micturition.

Dr. Eugene Fuller has included, in some thirty-four pages, a practical section on the diagnostic significance of pathological modifications in the urine.

In the section on urinary fever, Dr. J. A. Fordyce includes shock of a mild and severe form, urethral fever, urinary poisoning, uræmic poisoning, and urinary infection following operations upon the urethra or bladder. We quite agree that it is impossible with our present knowledge, to ascribe all disturbances following urethral operations to an identical cause, but the weight of evidence is, as Dr. Fordyce states, in favor of bacterial or ptomaine poisoning causing the fever.

The section on cystoscopy is written by Dr. Willy Meyer, who reviews

the history of the inventions for the purpose of illuminating the bladder, and describes at length the various cystoscopes now on the market; the method of using the cystoscope and of distinguishing what it reveals is clearly described.

Dr. S. Alexander is the author of the chapter on the cystites, in which he reviews the varieties of this disease and the medical and surgical treatment therefor.

The section on injuries and diseases of the bladder is by Dr. George Ryerson Fowler, who advises immediate laparotomy for intraperitoneal wounds of the bladder, and cystic drainage for extra-peritoneal wounds. The various abnormalities of the bladder are described and there is a thorough survey of the subject of puncture of the bladder.

Dr. A. W. Skene is the author of a concise and practical section on rupture of the bladder.

The section on tumors of the bladder is by Dr. F. S. Watson, who describes the various neoplasms that affect the bladder, and recommends the suprapubic operation for the treatment of these growths.

Dr. Arthur T. Cabot is the author of the section on stone in the bladder, prostate, urethra, and ureters. The statistics that have been collected show that in childhood there is little choice between lateral lithotomy and litholapaxy, though the latter has a slight advantage while suprapubic lithotomy is a more dangerous operation. In adult life the death-rates are decidedly in favor of litholapaxy, while suprapubic lithotomy remains more dangerous than either of the other operations, and in old age the mortality rates are overwhelmingly in favor of the advantages of litholapaxy. In fact recourse to the suprapubic operation is only advised by Dr. Cabot in cases in which the stone is too hard and too large to be crushed, or where an impervious urethra makes the introduction of a lithotrite or staff impossible, or in cases of encysted stone, or in cases in which it is desirable to combine prostatotomy or prostatectomy with the removal of the calculus. The technique of each method of operating is carefully detailed, and the chapter represents the latest surgical information on these topics.

Dr. L. A. Stimson is the author of the section on the surgical diseases of the kidney, in which the various features relating to wounds, injuries, and those diseases of the kidneys that demand surgical interference are appropriately considered.

The subject of tuberculosis uro-genitalis is presented by Dr. John P. Bryson with the thoroughness characteristic of that gentleman's scientific work. His advice regarding the exceeding care that should be exercised in determining the advisability of the removal of a tubercular testicle will probably meet with dissent from those that hold to the desirability of the removal of all tubercular foci.

Dr. C. W. Allen is the author of the section on diseases of the scrotum.

Dr. James Bell is the author of a brief section on hæmatocele and anomalies of the testicle; Dr. E. C. Burnett, of a section on acute and chronic orchitis, syphilitic testicle and fungus testis benignus; Dr. J. P. Bryson, of a section on tumors of the testicle, irritable testicle, and excision of the testis; Dr. J. A. Wyeth and W. W. van Arsdale, of the section on hydrocele and spermatocele; and Dr. E. L. Keyes, of the section on varicocele and ablation of the scrotum. The names of these gentlemen are sufficient warrant for the character of the work.

Dr. Paul Thorndike has written a brief but comprehensive section on diseases of the seminal vesicles.

The editor of the volume, Dr. Prince A. Morrow, has in addition to his other work, found time to write an interesting section on the functional disorders of the male sexual organs. We are glad to note that issue is taken with Sir James Paget's statement that, other things being equal, masturbation is not more injurious to the individual than coitus, cogent reasons being presented why this dictum is fallacious. Further commendation might be given to the very sensible remarks regarding the advice, too frequently given by physicians, that patients suffering with that neurotic consensus, known as spermatorrhœa should marry. The subjects of impotence and sterility are considered without effort towards sensationalism but with critical judgment.

The final section in the volume is on gonorrhœa in the female and is written by Dr. A. F. Currier. He calls attention to the fact that the disease may appear as a vulvitis, bartholinitis, vaginitis, urethritis, endometritis, salpingitis, ovaritis, or peritonitis, or two or more of these conditions may be associated. The influence of gonorrhœa in causing sterility is referred to with due credit to Noeggerath's pioneer work in this matter.

The volume is well printed, the illustrations have been selected with care and executed with the artistic skill that is a feature of all the works that are published by this house. Both from a scientific and artistic standpoint this volume gives promise that the series will be a valuable addition to medical literature.

S. T. A.

Items.

American Association of Genito-Urinary Surgeons.—The seventh annual meeting of this Association will be held at the Four Seasons Hotel, Harrogate, Tenn., on Tuesday and Wednesday, June 20, and 21, 1893. The titles of papers or contributions to be presented should be sent to the secretary, Dr. J. A. Fordyce, 66 Park Avenue, New York City.

Death of Professor Hardy.—Professor Alfred Hardy the oldest of the French dermatologists and Professor of Clinical Medicine in the Paris Medical Faculty, died on the 23rd of January, 1893 after a few days of illness.

Professor Hardy was as well known abroad as at home as the author of important contribution to the literature of dermatology. He was Honorary President of the last International Congress of Dermatology and Syphilology held in Vienna in 1892.

Correction.

On page 70 of the February issue of this Journal the name of the author of the Original Communication "Report of a case of Pemphigus Foliaceus" should be Alfred E. Regensburger, M.D. instead of Regenesburger as it there appears.



FIG. 1.
DR. FOX'S CASE OF NEVUS.

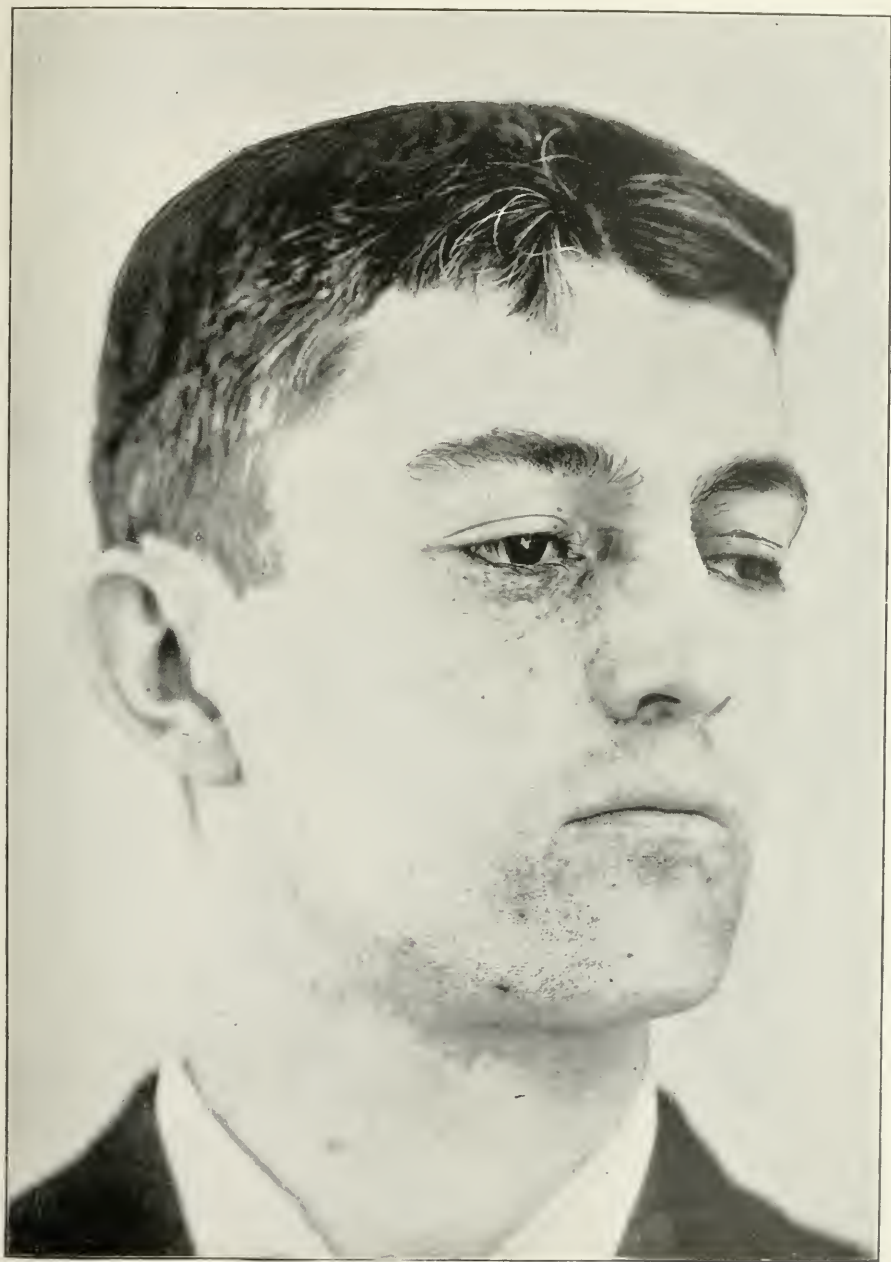
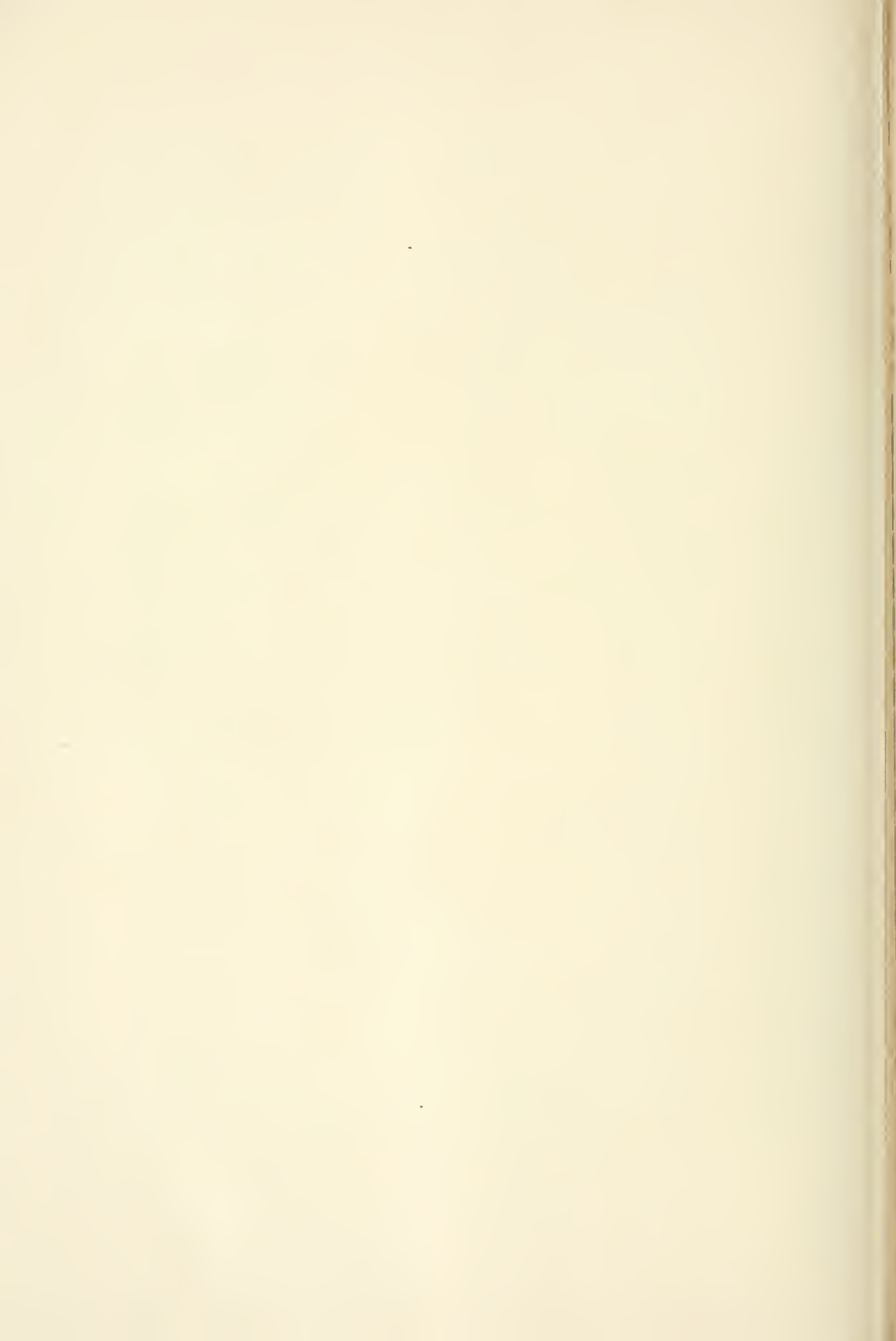


FIG. 2.
AFTER TREATMENT BY ELECTROLYSIS.



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No. 5

Original Communications.

THE REMOVAL BY ELECTROLYSIS OF AN EXTENSIVE HAIRY
NÆVUS OF THE FACE.

(With Plate.)

BY

GEORGE HENRY FOX, M.D.

THE removal of small hairy moles from the face or elsewhere is often accomplished by means of the knife or caustics and a satisfactory result obtained. But in the treatment of those pigmented and hairy patches which involve a considerable extent of surface, and when seated upon the face occasion such a striking deformity, the use of the electrolytic needle is perhaps the only method which will remove the unsightly growth and leave the skin in a nearly if not quite normal condition. The satisfactory result usually attained by use of this method and so often missed by the employment of various caustics is due to the fact that no destructive agent can be kept under control to the extent which is possible in the use of electrolysis.

The subject of the accompanying illustration, a youth of 22, came to me in May, 1889, with a hairy nævus upon the right cheek so conspicuous on account of its dark color and elevation above the level of the surrounding skin that it naturally attracted attention wherever he went and was the source of great annoyance to the bearer.

The growth occupied a portion of the right cheek, involved the whole of the lower eyelid and extended as far as the ridge of the nose. It was raised and verrucous in appearance and was

mostly covered with a growth of coarse, dark hair, which the patient kept short by use of the scissors. In the center of the patch there was a mass of dry, blackish, friable substance projecting a half inch or more and evidently partaking of the nature of a cutaneous horn. -

The treatment consisted in carefully passing a fine, flexible steel needle connected with the negative pole of a galvanic battery, through the most superficial portion of the growth, the circuit being completed by the patient grasping a moist sponge attached to the positive electrode. This was repeated until the electrolytic destruction of tissue reduced the growth to the level of the surrounding skin, removed the pigmentation and to a certain extent destroyed the hypertrophied hair follicles. The slight growth of hair which persisted after the affected skin had become smooth and comparatively normal in color was destroyed by the introduction of the electrolytic needle into each separate follicle according to the method employed in the treatment of superfluous hair upon the chin and elsewhere.

The battery used consisted of forty Law cells with a rheostat reducing the current to a strength of from three to five milli-amperes. The effect of the electrolytic action around the needle was to produce a destructive inflammation which was quickly followed by a thin superficial crust which dried and fell usually in a few days.

The long continued treatment in this case was by no means painless, especially upon the eyelid, but the patient, animated by his desire to have the unsightly growth removed, never once made the slightest complaint. The operations which extended over a period of nearly four years were often repeated week after week, while, on the other hand, intervals of several months were allowed to elapse. At the end of the first year about one-half of the growth was destroyed and had it not suited the convenience of both patient and physician to proceed slowly with the treatment, doubtless the whole of the growth might have been removed in much less time. In the treatment of such a case, however, the highest degree of success depends upon taking sufficient time, and any undue haste is very liable to lead to the unnecessary formation of deep and permanent cicatrices. To completely remove the disfiguring growth and to leave the affected skin in the best possible condition time is indispensable, and electrolysis seems to offer the safest and surest method of accomplishing the desired result. It may be added that not only is time required to achieve the result but a considerable

amount of patience on the part of the physician and persistent pluck on the part of the patient. With these at command a hairy nævus upon any portion of the body and of any size can be removed and the skin left in an almost normal condition.

Doubtless the majority of surgeons will look with little favor upon a plan of treatment of a hairy nævus involving the amount of time and trouble which was devoted to the case reported, and some will lay great stress upon the fine results to be obtained by excision followed by plastic operations or by skin grafting. But how do the results compare when viewed from a cosmetic standpoint? Satisfactory and even brilliant as the results may be which have been achieved by plastic surgery in cases where the corium has been destroyed by injury or malignant disease, the condition of the skin remaining after such treatment is quite different from the almost normal appearance now presented by the patient whose case has been described.

In the *Medico-chirurgical Transactions* of 1878, a case is reported by Mr. W. Marrant Baker, in which a hairy mole occupying half the forehead was removed by means of the scalpel and caustics. The patient was a girl of ten years and the treatment of the case extended over a period of nearly five years. It was claimed that this was at that time the largest hairy mole ever completely removed by operation. The result as shown by lithographs, representing the case before and after treatment, was certainly a brilliant one although the notes indicate that tiny patches of slightly pigmented skin were left, together with fine hairs almost imperceptible except on close inspection. The cicatricial tissue was smooth, whitish, glazed and supple. From the description given it may be justly inferred that the result obtained in Baker's case was by no means as perfect as in the case now reported. And in comparing illustrations it must be borne in mind that lithography usually glosses over pigmentation and roughness of the skin, which the photographic negative (when not *retouched*) only tends to exaggerate.

In comparing these two cases it is further to be borne in mind that a nævus of the cheek or forehead might be successfully treated by a method which would utterly fail in a case where the eyelid was involved. Electrolysis appears then to be the only available method of treatment in certain cases of hairy nævus, and is undoubtedly the best procedure to be adopted in any case.

18 East Thirty-first Street.

ADENO-CYSTOMA INTRACANALICULARE OCCURRING IN A
NÆVUS UNIUS LATERIS.

BY

GEORGE T. ELLIOT, M.D.

Dermatologist to Demilt Dispensary and the N. Y. Infant Asylum ; Assistant Dermatologist to the N. Y. Skin and Cancer Hospital, etc., etc.

THE patient, a young man, 26 years of age, in good physical and functional health, consulted me in September, 1887, for some annoying lesions situated in the right suprascapular space, just along the outer border of the trapezius muscle. According to him, these had been present from his very earliest childhood, but had given him no trouble whatever, until four years previous to the date of consultation, when the lesions had become irritated by the rubbing of the suspenders he was wont to wear.

The lesions were about a dozen in number and arranged in such a manner as to constitute a linear patch, one and a half inches long and a half inch broad. The majority were closely aggregated together, but some were discrete and separate, varying in size individually from a small pea to a bean. The consistency of some was dense, of others soft, the former being bluish red in color, the latter pale red. Those which were aggregated together and had been subjected to irritation were distinctly warty in appearance, somewhat painful, and bled slightly when the crusts covering them were removed.

The general history of the process and the clinical appearances noted suggested an irritated nævus unius lateris and that diagnosis was made. As the most rapid means of cure, the entire patch was excised, the edges of the wound stitched together and healing took place by first intention.

The portion removed was cut into small pieces, and some hardened in alcohol, others in osmic acid. The sections made were stained with alum-carmin, borax carmin, and Bismarck brown.

When examined with low powers, the especial and most important features were found to be situated in the corium, which at various depths contained a large number of cavities of all sizes. The majority were low down in the cutis, some even in the fatty layer, but broken chains of these cavities were also seen stretching upwards towards the epidermis. In the latter case, the cysts were usually single, but in the former, they were

multiple and aggregated together in various numbers, being of variable shape and not uniform, in this evidently depending upon the plane of the sections made through them. Most of the smaller cavities were lined with a basement membrane, upon which were one or more layers of cubical-epithelial cells surrounding a central lumen, but in many, degeneration of the inner cells had occurred and the lumen was ragged in outline. The same appearances were found in the larger and in the aggregations of cavities, but in the majority the cellular degeneration had been more extensive and only one row of cubical epithelium lined the cyst cavity or there were simply remains of the basement membrane, or in others not even these were seen, but only a cavity. In the cysts themselves, granular matter especially was found, but in many, there were also cells in various stages of degeneration, some with nuclei still staining well, others in which the nuclei could only be faintly traced. There was no difficulty in locating the pathological process in the sweat coils and ducts. The cystic formations corresponded in their site in the skin with these, and there was also, morphologically, agreement in many particulars. Besides portions of unchanged sweat coils could be seen in the aggregation of cysts,

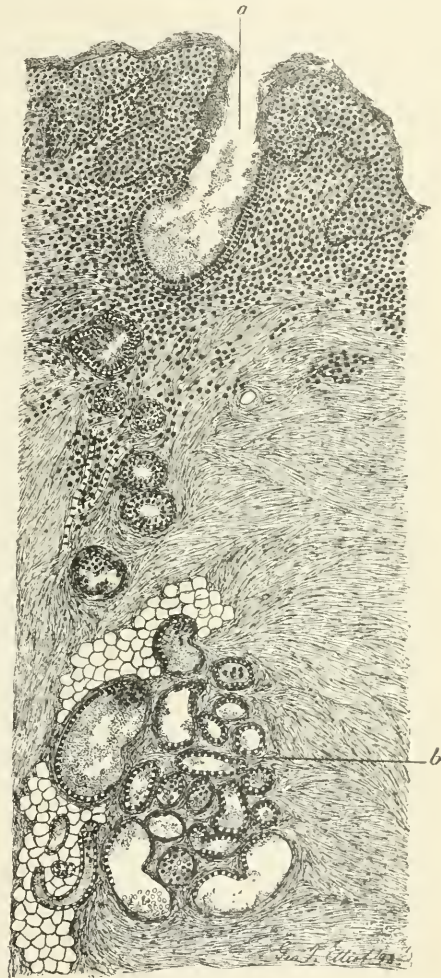


FIG. 1.

Section through skin, showing coil (*b*) of sweat glands in various stages of cystic degeneration, and (*a*) dilated openings of duct.

and also others which were in the first stages of the degenerative process ; again in several sections, a part of a duct could be seen starting from an extensively degenerated coil and ascending upwards, and in one section a duct similarly connected was found in its entirety, extending up to the external surface. Under these circumstances, there could be no question but that the seat of the process was the sweat coils and their ducts, the cavities being portions of the coils dilated by the cellular proliferation which took place in them, and which subsequently underwent degeneration and death, their place being occupied

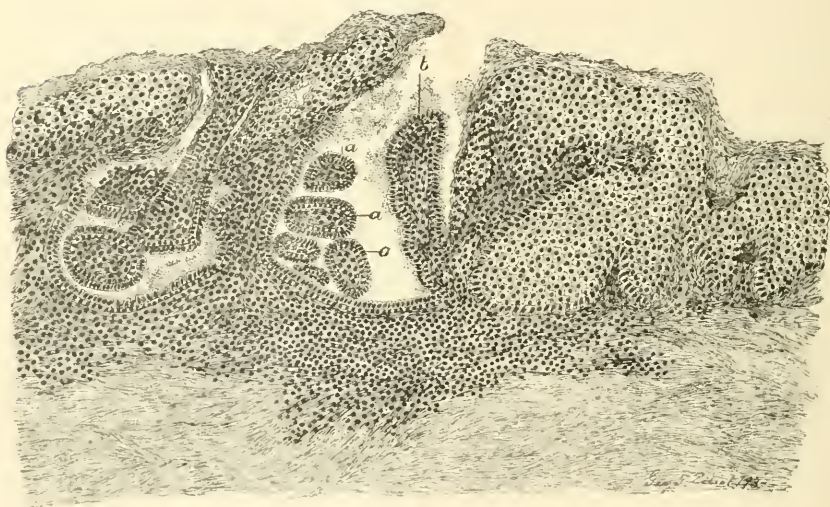


FIG. 2.

Verrucous proliferation at rete and two cystic cavities formed in sweat ducts. *b*, an intra-canalicular ingrowth ; *a a a*, sections of ingrowths similar to *b*. The same appearances are observed in the cavity on the left.

by granular matter and probably fluid. In Fig. 1, there is represented a coil in various stages of cystic formation, from an almost normal portion of a coil to the large cavity lined by vestiges of a basement membrane and a few cubical epithelia and containing the granular remains of the cells formerly filling it up. Above the cystic aggregations, dilated portions of the duct can also be seen forming a broken chain, which leads up to the cutaneous surface, and at this point the orifice is seen to be much dilated and in the sections as a whole, presented changes deserving of special mention. It was found that this

portion of the duct just below the rete had evidently undergone extensive proliferation in every direction, cavities lined with cubical epithelium and a basement membrane being seen extending to considerable distances away from the part of the canal passing through the rete, although still remaining in open communication with this latter, which was much dilated and in fact entirely transformed in appearance. This cavity formation in the portion of the duct in the rete and just below it can be

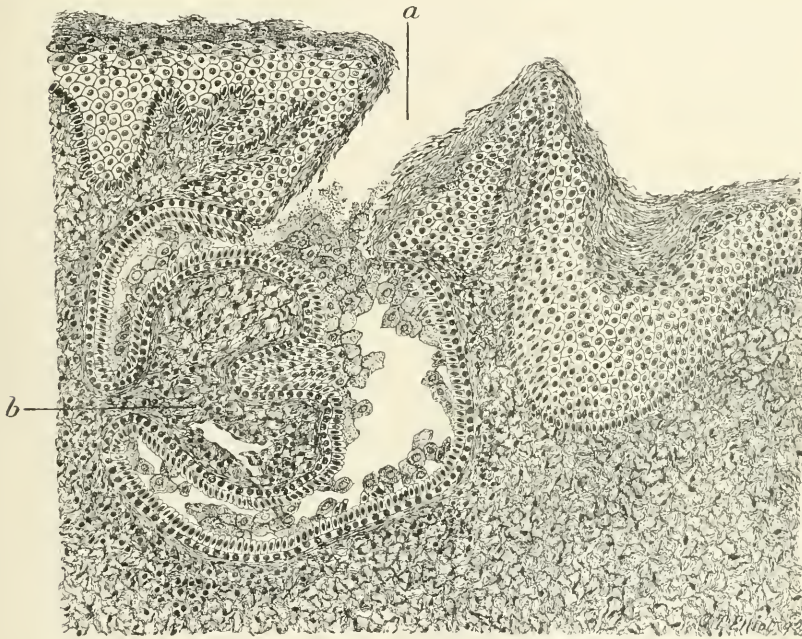


FIG. 3.

From an osmic acid preparation, showing an intracanalicular ingrowth. The canal of the sweat duct (*a*) is seen much dilated and proliferated just below the epidermis, and on one side a polypoid bud (*b*) juts in, partly filling up the cavity.

seen in Figs. 1, 2. In Fig. 2, there will also be observed an ingrowth (*b*) and several bodies of varying shape (*a*, *a*, *a*) constituted of connective tissue surrounded by a basement membrane and cubical epithelium. These bodies are undoubtedly sections across the free portions of intracanalicular ingrowths similar to (*b*), and this intracanalicular growth was beautifully shown in an osmic acid preparation from which Fig. 3, was drawn. In this section, the polypoid bud is seen jutting into

and lying free in the cavity formed by the proliferation of the duct at its upper portion, and it can be easily understood from this how the microtome knife passing through any portion of it, except the neck, would give origin to the "bodies" seen lying in the cavity of Fig. 2.

Besides the features mentioned, the usual appearances incident to a warty growth were noted in the papillary portion of the cutis and in the rete. More or less extensive round-cell infiltration was also present in the upper portion of the derma and throughout its entirety many mast cells could be seen.

When the histological features noted in the sections made from the lesions, which on the patient were considered as an example of a *nævus unius lateris*, are summed up, it is evident that they have reference entirely to a cystic degeneration of the sweat coils and their ducts. It is for this reason, that I would describe the case as an adeno-cystoma of the sweat glands and I would add to this designation the qualification, intracanalicular, on account of the polypoid ingrowths found in the majority of the ducts at their upper portion. I do not think it would be strictly correct to regard the changes in the coils as representing an adenoma—there not being any new formation of gland tissue, but only a proliferation of the cells lining the already existing coils of the gland, followed by death of these cells and a consequently resulting cyst—and I have, therefore, preferred the term adeno-cystoma to that of cysto-adenoma. The presence of the intracanalicular ingrowths is interesting, though I do not know that they are of any very especial importance. Still they have never before been met with by me in sections of morbid phenomena occurring in the skin, nor have I ever seen any mention made of such an occurrence. Intracanalicular ingrowths in fibromata and sarcomata of the breast are not so uncommon, and sections of such cases have been studied by me and are in my possession, but their development in connection with the sweat glands may certainly be considered as almost unique.

Very recently Petersen¹ has also reported a case of apparent *nævus verrucosus unius lateris*, which on microscopic examination proved to be an adenoma of the sweat glands. In his opinion, the pathological process in his case was intimately connected with the embryonal development of the coiled glands which had undergone a serious deviation from the normal course. Unquestionably, the histological features presented by Petersen's

¹ Archiv. S. Derma. et Syph. 1892.

case warranted his opinion, but I do not think the same conclusion can be made in regard to mine. On the contrary, the fact that all of the glands affected were fully developed and were in their normal location in the skin; that the inception of the process could be seen in many of the glands and its entire course followed; that no glands in arrested development could be or were found in the sections, all of these facts would tend to show that the pathological condition in these glands was an acquired one, if we may so express it. That is, the cystic degeneration occurred in these glands from some cause, probably the irritation of the suspenders, and not as an embryonal abnormality as in Petersen's case.

The conclusion, which I would make in regard to my case would, therefore, be, that the pathological process in the coiled glands was entirely a secondary one, their degeneration being a possibly accidental result of the irritation to which the surface was subjected and its inception dating from the time that the patient stated that the lesions became sore and painful. I do not think that the same process existed from earliest childhood, but it appears, rather, that the original lesions described as persisting unchanged until four years before I saw the man, were in all probability what is termed a *nævus unius lateris*, and it was the sweat glands in the skin upon which the *nævus* had developed that later became attacked by the pathological and degenerative process. It is certainly interesting that the histological examination of two clinical instances of *nævus unius lateris* (Petersen's and my own), should have both shown an affection of the sweat glands. Possibly more extensive use of the microscope in connection with such morbid phenomena occurring on the skin may change our opinions very materially in regard to their nature.

7 West Thirty-first Street.

THE TREATMENT OF SUPPURATING BUBOES BY INJECTIONS
OF IODOFORM OINTMENT.

BY

WILLIAM K. OTIS, M.D.

THE frequency of suppurating glands in the groin resulting, as they may, from any one of the venereal diseases, from tuberculosis or trauma, renders this affection one with which we are frequently brought in contact, and it is one which is especially obdurate to all recognized forms of treatment.

The so-called abortive treatment, either by pressure, the application of the actual cautery, the inunction of green soap, or any of the various methods which have been so frequently advocated, while ideal in conception, is so unreliable, and except in cases of very mild infection, so inefficient that when apparently it does succeed, we are usually in doubt whether the gland would have gone on to suppuration even without any treatment whatsoever.

The good, old-fashioned method of freely laying open the abscess, and allowing it to drain and granulate for weeks, renders the patient exceedingly uncomfortable during that period, permits of the infection of other glands of the same chain, and leaves a well-marked and tell-tale scar.

Excision of all implicated glands, the ideal method, from a surgical standpoint, means a difficult, and to some extent, a hazardous operation in a dangerous, anatomical neighborhood, the retention of the patient for some weeks in bed, and a scar, compared with which that resulting from the old method is but trifling.

On these accounts I was led, as far back as 1886, to try a method advocated at that time by Dr. Scott Helm, who withdrew the pus from the abscess cavity in suppurating buboes by means of an aspirator; washed it out with a solution of carbolic acid, and refilled it with a mixture of iodol and vaseline, and who reported in August of that year, a series of twenty-three cases, only one of which remained uncured by this method.

At that time, however, while very well satisfied with two cases so treated, I was unable to pursue this method, and it was not until 1890, when Potain reported a series of forty-one cases treated by the injection of a mixture of iodoform and vaseline, one-half of which recovered in less than five days, and the longest in twenty-three days, that I was again induced to try this plan of treatment.

Being at this time connected with the Genito-Urinary department of the Vanderbilt Clinic, all cases of suppurating bubo were treated after the following method.

The skin, for some eight or ten inches about the affected area was rendered thoroughly aseptic by scrubbing with green soap, washed with sulphuric ether, and then douched with a solution of mercuric chloride 1-1,000. A narrow bistoury was then inserted into the abscess cavity, and the contents gently but thoroughly squeezed out. The cavity was irrigated with a solution of mercuric chloride 1-1,000, and immediately filled to moderate distension with warm iodoform ointment, (10 per cent.) care being taken not to use a sufficient degree of heat to liberate free iodine. The syringe used for introducing the ointment, was the ordinary cone-pointed, glass, clap syringe. The plunger being removed, the barrel gently warmed in the flame of an alcohol lamp, was filled with the ointment by means of a spatula, and the plunger replaced. On finishing the injection, at the instant of withdrawing the syringe from the wound, a compress wet with cold bichloride solution was applied, which instantly solidified the ointment at the orifice, preventing the escape of the contents of the abscess cavity. A large compress of dry bichloride gauze was then applied, covered by a protective dressing of cotton, and retained by means of a firm spica. The patient was requested to return at the end of four days. If all was well at this time, the dressing was simply re-applied, but if there were any evidences of inflammatory action, the wound was thoroughly irrigated and cleansed, and the injection repeated.

Of sixteen cases so treated, collected for me by Dr. Geo. H. Gaidzakian, who was assisting me at the time, nine were reported cured in six days, three in twelve days, one in fourteen days, one in twenty-three days, and two deserted during treatment.

The advantages claimed for this procedure, are:

- 1st. That it is simple and safe.
- 2nd. In suitable cases cure, as a rule, seems to be more rapid than by any other method.
- 3rd. That the patient is not prevented from going about during treatment.
- 4th. The first gland being rendered thoroughly aseptic, renders it less likely that other glands in the chain will become infected (?)
- 5th. *It leaves no tell-tale scar.*

6th. It in no way interferes with the performance of any subsequent surgical procedure, if such should be deemed advisable.

5 West Fiftieth Street.

LESIONS OF THE MUCOUS MEMBRANE CORRESPONDING TO LESIONS OF THE SKIN.

BY

JOHN V. SHOEMAKER A.M., M.D.

Philadelphia.

A PARADOXICAL title, such as "The Dermatology of Mucous Membranes," might be used to describe the subject matter of this paper. Most diseases of the skin depend, at least partially, upon exciting causes developed within the economy, in other words, upon chemical products of bacterial activity or tissue change or to alterations of the capillary circulation brought about by vaso-motor influence.

We should naturally infer that constitutional causes capable of giving rise to disease of the skin, the protective tissue of the external surface, should likewise provoke corresponding manifestations upon the tissue which lines the interior surface. The skin and mucous membrane are continuous and their structure is analogous. In each a substratum of connective tissue, containing white and yellow elastic fibres, is covered by a layer of epithelial cells. Each is richly supplied with blood vessels, lymphatics and nerves, each contains papillæ and glands.

The epithelium of mucous membrane is modified in accordance with the different functions of that tissue. Though not so plainly divisible into strata as those of the latter, the epithelial cells of the former are in different situations characterized by more notable peculiarities of form than those of the integument. The connective tissue of mucous membrane is softer and of looser texture than that of the skin, and the elastic fibres are fewer in number. The glandular element is more unequally distributed in mucous membrane, reaching its highest development in the stomach.

The inference which may be drawn from a consideration of the facts of structure is strengthened by a knowledge of the functional and pathological relationships which exist between the two tissues. Embarrassed digestion is reflected upon the

skin in the form of erythema, urticaria, acne, czema, and other affections. On the other hand, though, by reason of the modifications of its structure, we are often unable to trace an actual correspondence in the form of lesion, diseases of the skin are often accompanied by disease of the mucous membrane. This coincidence occurs more often than is generally recognized and presents an interesting subject for study, which, nevertheless, has been comparatively little cultivated. Every general practitioner is familiar with the characteristic involvement of the mucous membrane in eruptive fevers, in erysipelas, in syphilis and tuberculosis. The occurrence, under a recognizable form, of urticaria, pemphigus, eczema and other maladies generally considered peculiar to the skin, is frequently unsuspected. The softer and more lax structure of mucous membrane, its higher color, the thinness and less resistant power of its epithelium are circumstances which may often prevent the recognition of an identical process upon skin and mucous membrane. The primary lesions of skin diseases occur upon the mucous membranes but often run through their phases with such rapidity that the physician can only behold a secondary alteration which might be due to a variety of causes and which may display no resemblance to the lesion of the skin which it, nevertheless, represents in the sense of having a common cause.

Purpura hæmorrhagica, as the name indicates, is accompanied by a discharge of blood from outlets of mucous tracts. The hæmorrhage may make its appearance about the same time or a little subsequent to the extravasation into the skin. Occasionally ecchymotic spots are observed upon the visible mucous membranes prior to any manifestation upon the skin. The extravasation of blood may occur from the mucous membrane of the respiratory, gastro-intestinal or genito-urinary tract. In addition to the more usual manifestations, hæmorrhage may take place in serous cavities, the substance of viscera and the medullary cavities of bones. The gums are generally covered with blackish scabs beneath which the mucous membrane is pale. Henoch, Hewé and others have described a form under the title of purpura fulminans or purpura foudroyant, occurring in children, rapidly fatal without hæmorrhages from mucous surfaces. A case met with by Dr. Henry Jackson,¹ of Boston, would seem to belong to the same type, as death resulted upon the fourth day. This case was distinguished, however, by severe hæmorrhages from the nose, stomach, bowels and bladder. The pa-

¹ Archives of Pediatrics, December, 1890.

tient was a boy, five years of age, who had lately entirely recovered from a mild attack of measles. In purpura rheumatica, also, we may witness, in addition to gastro-intestinal disturbances, as colic, vomiting and diarrhœa, hæmorrhage from the stomach or bowels. An extraordinary case was observed by Dr. J. H. Thompson, of Kansas City, Mo. A girl eight years of age, was attacked by purpura rheumatica. The inner surface of the lips and anterior half of the tongue were covered with a herpetic eruption which formed a continuous mass upon the mucosa and extended to the skin of the chin and nose. At first yellowish white in color, it became, within twenty-four hours, black with extravasated blood. At the same time, a suppuration iridocyclitis attacked both eyes. Constitutional symptoms were severe. The child eventually recovered but remained permanently blind.

Dr. Audubert has reported¹ from the clinic of Prof. E. J. Moure a case of purpura of the mucous membrane of the mouth, pharynx and larynx. The patient, a man fifty-nine years of age, had been under treatment for laryngeal tuberculosis, for two months, when disseminated spots of purpura made their appearance in the mouth and pharynx. They were of a vivid red color, did not project beyond the surface nor disappear upon pressure. They were found upon the soft palate, tongue and right ventricular band, were not painful to the touch and caused no difficulty in swallowing. Ten days after they were first observed they had nearly disappeared and were undergoing changes of color indicating resolution of the extravasations. But as the first crop was removed new patches developed upon the inner surface of the left cheek, the gums and the posterior region of the pharynx. No lesions of the kind were present upon the skin. The nasal mucous membrane was normal in all its parts. The purpura was doubtless the result of tuberculosis.

The distinctive affection of the mucous membrane are so universally recognized as constituting an essential feature of the disease in measles, scarlet fever and rōtheln. Though the catarrhal inflammation in measles presents no analogy of form to the coarsely papular and crescentic eruption upon the skin, a somewhat closer parallelism is observed in scarlatina, where the inflammation of the throat is, prior to ulceration, of the diffuse erythematous type similar to the efflorescence upon the skin. The ulceration may, perhaps, be compared to the

¹ Annales de Polyclinique de Bordeaux, No. 5, 1891.

desquamation and loss of hair and nails upon the outer surface.

In variola the eruption as seen upon the mucous membranes bears a more marked resemblance to the typical manifestation upon the skin. During the period of invasion there may already be seen upon the pharynx and tonsil a dull redness of color with points of elevation which subsequently become distinct papules. Both vesicles and pustules can be distinguished in the buccal cavity. Owing to their situation the pustules are of limited duration and their epithelial covering soon yields, exposing an ulcerated surface. The lesions of variola simplex may appear upon the pharynx, larynx, bronchia and other mucous surfaces and may excite bronchitis or pneumonia. In the confluent form of the disease the fauces, pharynx, larynx and tongue become swollen and covered with pustules and œdema of the glottis may result. The conjunctiva is often attacked. In malignant small-pox the appearance of the mucous membrane bears a resemblance to the atypical and hæmorrhagic rash upon the skin. The buccal and pharyngeal mucous membrane is covered by a purulent hæmorrhagic exudation. Hæmorrhage from the stomach, nose and bowels is not infrequent. Professor J. Nevins Hyde, of Chicago, speaks¹ of an autopsy made by himself upon the body of a male subject dead of unmodified variola. In this case there was no portion of the alimentary canal from the mouth to the anus which was not studded by thickly set pustules. Typical vesicles of varicella may develop upon the conjunctiva or roof of the mouth, upon the inner side of the cheek, the tongue or palate.

In addition to its specific effect upon Peyer's patches, the poison of typhoid fever usually gives rise to bronchitis and, not infrequently, to pharyngitis or laryngitis. No analogy can be drawn between these manifestations and the rose colored spots which appear upon the skin.

Erysipelas not infrequently affects the mucous membrane of the nose, mouth, pharynx, larynx, trachea or vulva. Erysipelas of the larynx is usually an extension from the face or nose though it may co-exist with the same disease in some more distant part. In erysipelas of the fauces, the tongue, pharynx and larynx are swollen and death may take place suddenly from œdema of the air passages. Occasionally erysipelas makes its first appearance upon some mucous surface. In the great epidemic of erysipelas which prevailed widely throughout Canada

¹ Pepper's System of Medicine, vol. 1, p. 539.

and the United States, in the years from 1842 to 1846, the disease generally began in the throat and fauces or simultaneously in these parts and upon the face and head. In some instances the disease is confined to a mucous surface. An interesting case has been observed by M. Mosny,¹ in which a primary erysipelatous broncho-pneumonia developed in a servant girl after two days' attendance upon her master who was suffering from facial erysipelas. Bacteriological examination and cultures revealed the presence of the streptococcus of erysipelas without mixture of any other organism.

It is well known that syphilis in any stage may attack the mucous membrane. The initial lesion develops at the spot where the infecting material gained entrance to the system. This may be within the urethra, upon the tongue, tonsil, conjunctiva or within the verge of the anus. The ulcers of late syphilis may form in any portion of the alimentary tract, in the nose, larynx, trachea or bronchi. In the secondary period of the disease a correspondence can be traced between the lesions of the skin and mucous membrane. Erythema of the nose, throat or vulva is analogous to the erythema of the skin with which it generally co-exists. The mucous patch is the counterpart of the condyloma.

The mucous membrane may be affected in erythema multiforme, and occasionally inflammation of the throat occurs a few days before the appearance of the eruption upon the skin. The slight fever, gastric disturbance and other constitutional symptoms which generally precede an attack of erythema nodosum are, in some instances, accompanied by soreness of the throat. In the course of the disorder nodules may form on the tongue or mucous membrane of the mouth and pharynx and may cause so much pain and difficulty in swallowing as to interfere with nutrition.

The close relation which exists between digestive disturbances and urticaria is universally recognized, but the fact that urticaria may attack a mucous membrane is, perhaps, not so generally known. Wheals may develop in the mouth, pharynx, upon the tongue or epiglottis. Cases of the kind have been observed by Kaposi, Cayla, Bock, Laveran, Sevestre, Hutchinson and others. Dr. A. Cayla contributed a paper to the International Congress of Dermatology and Syphilography held at Paris in 1889, describing a case of acute febrile urticaria with laryngeal and gastric crisis. He was called to at-

¹ Le Progrès Medical, Feb. 15, 1890.

tend the patient, a woman 65 years of age, who was suffering from dyspnœa. The patient was subject to an itching and a general eruption. The face was congested, the respiration frequent, the voice extinct. Several such attacks had occurred during the day and coincided with violent itching of the integument and the development of wheals. Upon the succeeding day the condition remained the same, but on the third day the embarrassment of respiration disappeared though the woman was afflicted with gastric derangement. This phenomenon, also was preceded by a violent itching of the skin. There was a sensation of burning and constriction along the œsophagus.¹ Dr. Bock² reported a case of urticaria of the tongue, which suddenly swelled until it filled the buccal cavity, was bluish in color, bright and glistening, hard and elastic in consistence. There was burning pain but no abnormal heat. The diagnosis rested upon the rapid development, the peculiar appearance of the tongue and the knowledge that the patient was subject to attacks of urticaria. Jonathan Hutchinson mentions³ the case of a man, aged about 39 years, who, soon after a sudden eruption of tingling and swelling upon the integument was attacked by great œdema of the uvula and soft palate. Subsequently the tongue swelled, and still later the patient experienced pain in the epigastrium with a sense of obstruction in the œsophagus. These symptoms continued for about a week. Urticaria of the mouth or epiglottis may occasion symptoms of asphyxia.

The characteristic lesion of lichen planus, though seldom developed upon the face, may attack the mucous membrane of the tongue, mouth or pharynx. In two instances Dr. L. D. Bulkley, of New York, has seen them appear primarily upon the glans penis. Dr. Feulard has reported⁴ two cases, one of a man, aged 30 years, and another of a woman, 59 years of age, in whom, though the eruption upon the skin assumed different phases, the manifestation upon the mucous membrane was identical in appearance. In the man the inner surface of the cheeks was affected. In the woman both the cheeks and tongue were attacked.

Herpetic eruptions frequently appear upon mucous membranes. The fever blister or cold sore is familiar to every

¹ Congrès International de Dermatologie et Syphilographie tenu à Paris en 1889. Paris, 1890, p. 780.

² Clinique de Bruxelles, May 1, 1890.

³ Archives of Surgery, 1889-90, I, p. 369.

⁴ Annales de Dermatologie et de Syphiligraphie, May 25, 1890.

person. Herpes facialis may also attack the conjunctiva. Owing to the delicate structure of the epithelial layer, together with the heat and moisture characteristic of mucous membranes the vesicles in these situations soon rupture exposing excoriations covered with a purulent fluid or with a yellowish or brownish crust. Professor Fournier has called attention¹ to the fact that apparently cured syphilitic patients are often subject to recurrent attacks of herpes of the tongue. The lesions are small, scattered, of short duration and seem not to be of syphilitic origin since they are aggravated rather than benefited by specific medication. They are thought to be due, in fact, to prior irritation of the mouth by mercury, and the use of tobacco. Dr. J. H. Thompson, of Kansas City, Mo., has observed² the rare association of herpes iris with croupous conjunctivitis. The eruption upon the integument was very abundant. The conjunctival sac was entirely filled by a croupous membrane, which glued the lids together and to the eyeball. Herpes proenitalis is common and is often mistaken for a syphilitic manifestation. The differential diagnosis may become especially puzzling in the female, in which the labia may be immensely swollen, the vesicles may coalesce and rupture. An offensive odor may develop and the condition may be additionally complicated by enlargement of the inguinal glands due to the severity of the inflammation. Occasionally, herpes manifests itself in the vagina or upon the neck of the womb.

Herpes gestationis may involve the mucous membrane. Living saw a case of herpes which originally appeared during gestation, but in which relapses subsequently occurred in the absence of pregnancy. In two of these relapses the mucous membrane of the mouth was severely affected.

Cases of herpes sometimes occur in which so much constitutional disturbance accompanies the eruption that they may appropriately be described as herpetic fever. In such cases the lesions are generally located upon a mucous membrane, as that of the mouth, conjunctiva or genitalia.

A vesicular eruption which sometimes appears upon the tongue, mouth or throat and which has been described under the name of herpetic angina appears, at least in some instances, to be identical with herpes zoster. The vesicles may coalesce, rupture and leave an erosion or ulcer. Dr. B. Pouzin's pub-

¹ La Semaine Médicale.

² See Kansas City Medical Record, November, 1889.

lishes¹ an account of two cases of herpetic angina with vesicular lesions which corresponded in situation to the course of various mucous and cutaneous branches of the trifacial nerve.

The bullæ of pemphigus may form upon mucous membrane. That variety of acute pemphigus which occurs principally among children and sometimes as an epidemic, is apt, in infants, to be complicated with purulent conjunctivitis. Since the publication of Steffan's paper in 1884 it has become recognized that pemphigus of the conjunctiva may give rise to the so-called essential xerosis, or shrinkage of the conjunctiva. In addition to the case observed by himself, Steffan collected the histories of fifteen cases which had been reported by others, and similar cases have been subsequently met with by Schmidt-Rimpler, Bäumlér and Deutschmann. Professor Deutschmann's observation related to an old lady, 71 years of age, in whom a typical process of xerosis was associated with pemphigus of the conjunctiva and roof of the mouth.

That fatal and, fortunately, very rare form of the disease termed pemphigus vegetans usually begins with pain in the mouth from formation of bullæ upon the mucous membrane. In a few days or weeks similar lesions develop upon the skin. In some instances the larynx and conjunctiva have been attacked. Hydro-stomatitis is the name bestowed by M. Quinquaud upon certain lesions occurring upon the mouth and throat of a young woman. Upon the hand were some small bullæ without a trace of erythema. Both the lesions in the mouth and those upon the hand were bullous from the beginning. Their development was accompanied by a febrile attack.²

In an exhaustive report to the International Congress of Dermatology and Syphilography, held at Paris, in August, 1889, M. Brocq reviews the varieties which have been classified under the name of pityriasis rubra or primitive generalized exfoliative dermatitis. In his general exfoliative dermatitis proper, or the sub-acute form, the mucous membranes may be involved. Conjunctivitis, coryza, stomatitis and superficial glossitis have been observed.³ In a case of universal pityriasis rubra described by Dr. O. C. McNary, of Leavenworth, Kansas, in *The Medical Bulletin* for March, 1892, the mucous membrane of the mouth had become invaded and the tongue was thickened

¹ Revue de Laryngologie, d' Otologie et de Rhinologie, March 1, 1891.

² Revue de Laryngologie, d' Otologie et de Rhinologie, April 1, 1890.

³ Edinburg Medical Journal, 1890, II, p. 814 seq.

and fissured. The eyes were injected and watery and there was some photophobia.

Eczema of the tongue is occasionally encountered. It seems to be especially connected with gastro-intestinal derangements. Its development upon the tongue is essentially similar to that upon the skin. It may assume very fantastic contours, and Besnier compares it with seborrhœic eczema. Eczema of the vulva may invade the vagina and extend as far as to the neck of the womb.

Dermatitis herpetiformis has been seen upon the tongue, mucous membrane of the mouth, throat and nose. The disease may, indeed, make its first appearance in the mouth.

Psoriasis very seldom invades a mucous membrane. It has been seen, however, upon the prepuce.

Rhinoscleroma generally begins upon the septum or ala of the nose. It is, in fact, more peculiarly a disease of mucous membrane than of the skin. The disease may originate in the pharynx, or larynx, and one case has been recorded in which it started from the hard palate.

In the lupus erythematosus disseminatus portrayed by Kaposi, the mucous membrane of the gums and cheeks is sometimes attacked. Professor W. A. Hardaway, of St. Louis, Mo., has recorded a case of lupus erythematosus with unusual complications, which might be compared with the disseminated variety of Kaposi.¹ About eight months after the commencement of the malady, the patient was seized with fever, swelling of the face and neck, and of the lymphatic glands. He also experienced difficulty in swallowing. The throat was œdematous without congestion or ulceration. The eruption declined; the swelling of the face diminished, but the glands suppurated; tuberculosis supervened, and death was not long delayed.

M. Vidal observed a case in which lupus erythematosus began at about the same time upon the hairy scalp and within the mouth. A patch extended along the inner surface of each cheek, from near the commissure to the lower molar teeth. In the center was a depressed patch of redness, encircled by a whitish border, forming festoons and branches. The white border was in slight relief, and apparent to sight and touch. The lesions were not painful, though there was some prickling, and a slight degree of pain upon eating.²

Lupus of the mucous membrane is precisely the same process

¹ Journal of Cutaneous and Genito-Urinary Diseases, 1889, VII., p. 477.

² Annales de Dermatologie et de Syphiligraphie, 1889, 2^e Ser., X., p. 785.

as when it invades the skin. According to Dr. Max Bender, who has analyzed a series of 380 cases treated in the clinic of Professor Doutrelepon, of Bonn, in 31.2 per cent., the mucous membrane was invaded before the disease appeared upon the skin.

Tuberculosis more commonly affects mucous membrane than skin, though, in addition to lupus vulgaris, several distinct varieties of cutaneous tuberculosis have been indicated.

A case of Addison's disease has been reported, in which no bronzing of the skin occurred, but the mucous membrane was pigmented. The discoloration of the mucous membranes, in jaundice, I need but to mention.

In tubercular leprosy macules and tubercles develop upon mucous as well as cutaneous surfaces. The deposit may take place in the mouth, nose, throat, larynx, and upon the tongue, epiglottis and conjunctiva. The uvula and the epiglottis may be partially destroyed, the voice loses its tone, and becomes harsh. The tongue may become swollen and cracked, and œdema and ulceration of the glottis may occur. In the anæsthetic variety anæsthesia of the mucous membrane of the mouth and pharynx was present on both sides in ten per cent. of the 330 cases examined by Dr. Castor. In but a few cases was the anæsthesia limited to one side. Anæsthesia of the conjunctiva is frequent in all varieties of leprosy.

I need merely allude to the frequency with which epithelioma invades mucous surfaces as a primary manifestation.

Xanthoma tuberosum has, at times, been observed upon the palate, trachea, and lining membrane of the gall-ducts.

That the achorion Schönleini may develop upon a mucous membrane with which it comes in contact, is demonstrated by the case of Kundrat. The fungi, conveyed from the patient's fingers to his food, and then into his stomach, attached themselves to the mucous membrane, and produced the characteristic cup-shaped crusts, which were clearly recognized in the post-mortem examination.

In the foregoing cursory review, I have made allusion to a number of diseases peculiar to the skin, which may occur, recognizably under their own form, upon a mucous membrane. In other cases the mucous does not compare in form to the cutaneous affection, but is presumably due to a common cause. This is especially true of constitutional and infectious disorders. Diseases, the starting point of which is a cellular deposit, such as syphilis, tuberculosis, carcinoma, etc., obviously affect any

surface with which they primarily or secondarily come into contact.

The subject of this paper is but one of the many examples of the intimate connection between local and constitutional diseases. Exclusive of affections caused by animal parasites, by the trichophyton fungus, the microsporon furfur and the achorion Schönleini, few affections of the skin originate from purely external causes or, on the other hand, are absolutely destitute of influence upon the system at large.

Society Transactions.

THE NEW YORK DERMATOLOGICAL SOCIETY.

222ND REGULAR MEETING.

DR. ELLIOT, *President, in the Chair.*

Case for Diagnosis.—DR. BULKLEY presented a patient, Mrs. G. B., aged 25, married five years, a native of Holland. She had a seven months' child which lived three and a half months, then she had a miscarriage at four and a half months, with excessive hemorrhage, for which she was in bed two months. While thus sick, she noticed the appearance of some lesions on the face, which since have continued to appear for several years, and have increased in number up to the present time, at no time having left her entirely free of them. The lesions seem to disappear and to be replaced by new ones; but during three weeks of watching, not much change could be recognized, although some of the lesions are of brighter color, and would appear to be fresher.

At present the face is thickly studded with small, red points, most of them oblong, about two by four millimetres in diameter, with no great variation in size, not at all raised, and not scaly. The eruption does not cause any itching or burning, and would not be noticed by the patient, but for the striking appearance, which the face presents. On pressure the lesions are found to be largely congestive, disappearing mainly, though some of them present a stain on removal of the finger. There is no eruption on any other part of the body, and the patient is in fair health except some rheumatic thickening of the wrists and several fingers.

DR. BRONSON thought that the eruption had the form of a localized roseola. He had suspected the presence of some cardiac trouble, but on examination nothing was found.

DR. SHERWELL inquired whether the case had been presented as one of purpura. He considered the disappearance of the eruption without leaving any marks of pigmentation as rather strange, as also the fact of total disappearance on pressure; for this reason he would not call it purpura.

DR. JACKSON'S opinion was that some alteration of the blood vessels

was probably present; perhaps it might be called telangiectasis. It seemed to him that some of the lesions were of a slightly papular character.

DR. FORDYCE thought there existed in the case a dilatation of the capillary blood vessels.

DR. LUSTGARTEN agreed with Dr. Fordyce, that temporary dilatation of blood vessels was present. He called attention to the fact that the patient had been quite frequently affected with polyarthritis rheumatica within the last eight years.

DR. ELLIOT thought that the case resembled Hutchinson's summer prurigo. He had recognized a number of small, atrophic spots among the red spots, and others slightly scaling. He could not regard it as a case of purpura, there not being any indication of hemorrhage whatever.

DR. BULKLEY thought, that in some of the spots there was some hemorrhage present. The blood vessels were dilated to such a degree, that rupture seemed certainly very imminent. He could not, however, call it otherwise but multiple telangiectasis.

Case for Diagnosis.—DR. FORDYCE presented a girl having a circumscribed infiltration of the dorsum of the hand, which had existed for three months.

The affection showed a tendency to peripheral extension, while some superficial scar tissue was present in the center of the patch. Slight papillary hypertrophy was evident in the infiltration, and at the margin of the patch, small abscesses could be seen. A marked sensitiveness was present over the entire patch.

DR. MORROW thought it was a case of lupus erythematosus.

DR. PIFFARD thought of tuberculoid disease rather than of syphilis.

DR. BRONSON thought the affection was not syphilitic because of the absence of any infiltration of the border, and because its mode of progress was different. A syphilitic lesion of so long duration would almost surely assume the serpiginous form, healing upon one side with the production of characteristic scars, while it continued advancing on another. The lesions at the periphery of the patch in the present case, were very superficial, and distinctly eczematous. The nodules were all in the center, where the disease was oldest. He believed the affection was primarily of a catarrhal character, and had become inveterate and infiltrated, on account of the presence of some parasite, and he saw no reason why it might not be a vegetable parasite.

DR. BULKLEY thought the case looked like local tuberculosis.

DR. KEYES said the color suggested lupoid nature of the disease.

DR. ALLEN thought it was neither syphilis nor lupus erythematosus, but tuberculosis. He had presented a similar case to the Society at a former meeting.

DR. CUTLER made a diagnosis of tuberculosis.

DR. SHERWELL made diagnosis of lupus.

DR. KLOTZ was inclined to believe that a parasitic, or rather microbic infection was the cause of the affection, similar to that disease which has been described by Rosenbach and others as erysipeloid, from which, however, the present case differed in several ways. There was nothing present to justify the diagnosis of tuberculosis or syphilis, particularly in the peripheral portions.

DR. ELLIOT believed the case to be one of tuberculous nature, and not due to a vegetable parasite, as erysipeloid is. This usually runs a slow and short course, and does not ulcerate or produce cicatrices. Pustules and abscesses occur not infrequently in tuberculous processes as a result of secondary infection, and their presence would not mean that the principal process was a non-tuberculous one.

DR. FORDYCE said that he had at first presented the case at his clinic as one of tuberculosis cutis, not as lupus, which never developed in a manner so rapid as this affection had done. The presence of the pustules favored the diagnosis of tuberculosis cutis; in lupus erythematosus there was much less infiltration than existed here. He had brought the case before the Society, to have considered the difference between tuberculosis verrucosa cutis and tubercular syphilide. Histological examination might reveal the true nature of the process.

DR. MORROW suggested a trial with specific treatment.

DR. KEYES said that the central portions of the patch looked somewhat like syphilis, but not the peripheral ones, which showed only a superficial process. Syphilitic serpiginous lesions did not creep forwards in so rapid a manner.

DR. ALLEN said that the bright color of the affection suggested something more active than a syphilis.

DR. SHERWELL missed the wave crest like outline characteristic of similar, syphilitic lesions.

DR. KLOTZ thought that the rapid, peripheral spreading rendered syphilis and tuberculosis both improbable, but suggested a more acute, inflammatory process.

Case of Raynaud's Disease.—DR. SHERWELL presented a patient with this disease, not insisting on the name, but on the very great similarity if not identity of symptoms, subjective and objective. The woman, M. Sn. 45 years of age, a Swede of healthy parents and herself perfectly well up to her thirty-seventh year; no absolute history of syphilis. The ends of all her fingers, as can be seen, are shortened and thickened and she suffers a great deal in cold weather or on exposure to cold water, etc. The condition first manifested itself about seven or eight years since and began on thumb, index, and middle finger of left hand; shortly afterward the other hand became affected symmetrically and at a later date, also the toes, though in lesser grade. The lesions and other symptoms are entirely typical, swelling, pallor, tingling, superficial gangrene, etc. The patient came under the care of Dr. Mosher, of Brooklyn, about two and a half years since, was put under mixed treatment at the time, and a relative cure and disappearance of acute symptoms followed, a chronic ulcer in the region of tibia, also healed under the same treatment. The same treatment is still continued and improvement slowly goes on.

DR. KEYES remembered to have seen a similar case in which he suspected the syphilitic origin of the disease.

DR. BRONSON said, he was inclined to agree with the diagnosis of Raynaud's disease and that while it might be indirectly due to syphilis, it would only be an incidental effect and that this same effect might be produced by other causes. The same thing was true of locomotor ataxia. It might be due to syphilis but was not necessarily so.

DR. KLOTZ was greatly interested in the case, which he had no doubt was one of syphilitic endarteritis. In studying this question several years ago, he had come across a paper by Hutchinson, describing a case of affection of the finger tips, in which occlusion of the peripheral arteries was suspected. He has later observed a case the exact counterpart of Hutchinson's patient, and had published it (August 1889 *Am. Journal Med. Sciences*). A second case of almost identical character he had observed in conjunction with Dr. Geo. W. Jacoby, who had been immediately struck by the similarity of the symptoms with those of his own case. In both cases specific treatment was followed by the disappearance of the symptoms. A case of gangrene of the fingers, on which an ascending syphilitic arteritis could be distinctly demonstrated, had been reported by Dr. D'Ornellas in the *Annales de Dermatologie*. In the present case the temperature of the finger tips was still considerably lower than that of other parts.

DR. LUSTGARTEN said, that a number of cases had been published which certainly showed the existence of a peripheral syphilitic arteritis. He had himself observed a patient who had had syphilis about thirty years previously, who woke up one morning with coldness and pain in second and third phalanx of left index which was followed by a blister-like exfoliation of the epidermis, shrinking and change of color like a dry gangrena. He recovered under treatment with iodide of potash.

DR. ELLIOT did not understand, why such cases should be specially called Raynaud's disease. They were examples of symmetrical gangrene, which arose under the influence of different processes among which were syphilitic endarteritis, diabetes, syringomyelia; and Raynaud's disease was only one form of this gangrene. In Raynaud's disease the vasomotor disturbances, ischæmia, cyanosis and redness occur in a local manner repeatedly and after a while are followed by the gangrene, that is, primarily a vasomotor disturbance exists which is followed by a trophic disturbance. We would not call this case one of Raynaud's disease, but one of symmetrical gangrene. Whether it was of a syphilitic origin would have to be determined by the history of the patient and the effects of treatment.

DR. SHERWELL, in answer to a question by Dr. Bulkley, said he had had two cases, in which Raynaud's disease had been diagnosed by experts, in which he knew the specific diathesis to have been present; and said, that while he did not insist on the names, he thought that cases like the present one were often put down under the category of this disease. He asked if it was not possible, or even probable, that the row of symptoms so designated might not be a late manifestation of syphilis after all.

Case for Diagnosis (Probably acute circumscribed œdema).

DR. CUTLER presented a male patient with an affection of the right side of the face.

DR. LUSTGARTEN stated that he had seen similar cases under the name of pseudo-erysipelas. The affection is due to infection from local troubles of the nose; if these are successfully treated the process stops. Clinically the picture resembles very closely that of true erysipelas, but the inflammatory symptoms are restricted to the nose and the neighboring parts. The process frequently recurs, is accompanied by hardly any fever and is apt (more than true erysipelas), to produce pachydermia of the affected parts.

DR. BRONSON did not regard the case as one of œdema circumscriptum,

in the latter disease there were no marks of inflammation such as heat, redness and subsequent desquamation. The œdematous patches or nodes came on very suddenly, often disappearing within twenty-four hours without leaving a trace. There might be some reddish or bluish discoloration, but there was no continued inflammatory infiltration after the œdema had subsided, and no desquamation as in this case. It did not seem to be erysipelatous either, because it was too superficial. It was more like some form of erythema.

DR. BULKLEY agreed with Dr. Lustgarten in the diagnosis of pseudo-erysipelas. In the cases he had observed the swelling seldom extended more than about two inches wide. The disease was cured by the treatment of the trouble within the nose, and was undoubtedly due to pus infection from the nose.

DR. ALLEN had observed a number of cases of circumscribed œdema, one producing a prominent swelling on the forehead. Another instance occurred in a boy, who first had had scarlatina followed by urticaria and then presented acute attacks of œdema of the face, but not like the case presented. True erysipelas would not be restricted to so small an area, but would spread. He had observed such circumscribed swelling with erysipeloid redness in connection with tonsillitis of the same side and believed it would be caused by infection from the throat as well as from the nose, and that true erysipelas often followed infection by way of the tonsils.

DR. KLOTZ also recognized the case as one of pseudo-erysipelas, or rather of the recurrent benign localized erysipelas, which he knew from personal experience.

DR. ELLIOT had never seen circumscribed œdema, returning always on the same spot or remain for such a long time as in this case. The disease appeared to him to be undoubtedly the result of an infection. These cases might be called erysipelatous, but were certainly not due to Fehleisen's streptococcus nor were they accompanied by the general symptoms belonging to erysipelas.

DR. CUTLER had observed the patient for several weeks without being able to decide between pseudo-erysipelas and circumscribed œdema, as the condition did not fit exactly in either class. The swelling appears very rapidly. The color is of a more intense red than is usual in œdema. The swelling disappears usually within twenty-four hours, sometimes within three days, but never later, and leaves the skin slightly red, and infiltrated, but never scaly. In pseudo-erysipelas an infection from some local lesion was necessary; but in this case the nose did not show any diseased condition. Although somewhat in doubt he was more inclined to the diagnosis of local circumscribed œdema.

DR. TAYLOR thought that during the debate the description given by Rosenbach and others for erysipeloid had been lost sight of; it always spread at the periphery and was migratory, its cause was a coccus. In this case he could not see any of these symptoms. He believed that the case was one of the circumscribed œdema as described by Matas, Osler and others.

DR. ALLEN said that there would be no confusion, if the name of erysipeloid was retained for the migratory forms upon the hands, etc., and pseudo-erysipelas for the localized form in the face.

DR. ELLIOT said, that it could not be Rosenbach's erysipeloid, for there was absolutely no clinical resemblance. Rosenbach had found a special

micro-organism in his erysipeloid, which, though he first described it as a coccus, yet later he found developed into very fine segmented threads.

DR. TAYLOR had observed a case in which an erythema migrans began as prickly heat, then spread and migrated almost over the entire body.

DR. LUSTGARTEN thought that for practical purposes the distinction of erysipelas, pseudo-erysipelas of the face and erysipeloid would be sufficiently exact.

Case of Bullous Eruption of the Hands.—Presented by DR. PIFFARD.

DR. MORROW said that he was treating a patient who presented almost identical lesions on the toes and that he considered them as chilblains. These affections showed great tendency to recurrence with the advent of cold weather for a number of years in succession.

DR. BRONSON thought that the affection was of the pemphigoid type and showed some features of Duhring's disease or of Bazin's hydroa bulleux; it was, however, more inflammatory than pemphigus, a distinct areola being present. He was inclined to consider the case as a neuropathic disease.

DR. JACKSON said this case seemed to be similar to one presented before by Dr. Fox with bullæ in the face, which left superficial loss of substance. In both cases distinct bullæ were present. He was not certain what name to apply to it. Perhaps erythema bullosum was as good as any.

DR. FOSTER agreed with Dr. Bronson.

DR. BULKLEY thought the case to be one of dermatitis venenata, considering the frequent occupation with paints, particularly with green ones.

DR. KEYES had observed a similar eruption, however, only on one hand, of a girl, who handled dyed ostrich feathers. After stopping this occupation the eruption disappeared.

DR. ALLEN said that if this was not a case of arsenical poisoning, it certainly resembled it closely; he had observed cases of undoubted arsenical dermatitis of the hand and feet clinically identical.

DR. SHERWELL remarked, to him the case looked very much like one of arsenical poisoning; he had observed similar lesions in cases of girls who were working on furs. For the case now in question, the patient, whom he had questioned closely, had told him that he was free of the affection in summer, when he was handling paints more than in winter; it seemed possible that it might be the effect of cold and change of weather.

DR. FOX thought that if the patient were kept under glass without coming in contact with paints or cold air for nine months of the year he would get this eruption on and off. The case had a decided similarity to that of the boy mentioned by Dr. Jackson, and was undoubtedly of neuropathic origin.

DR. KLOTZ did not see any reason why this affection should not be classed under the head of Duhring's dermatitis herpetiformis, particularly as intense itching was present. Arsenical poisoning would not produce so symmetrical lesions, but a much more intense dermatitis.

DR. PIFFARD agreed with Dr. Morrow that the eruption was the effect of cold, and that it might be called chilblain. The hydroa bulleux was an entirely different affection. He thought syphilis and scrofuloderma could be excluded, although several days ago it had looked like tuberculosis. The symptoms present did not agree with those of dermatitis from arsenical

poisoning and the disappearance of the trouble in warm weather certainly spoke in favor of cold as the etiological moment.

DR. KEYES asked whether the patient had been suffering particularly during the late spells of cold weather.

DR. MORROW said that in arsenical poisoning in girls handling green colors in dying feathers, etc., the features of the skin affection were different, numerous small, deep-seated vesicles and pustules were found there and more intense redness. He called attention to the fact that neurotic exoriations in leprosy very closely resemble the lesions seen on Dr. Piffard's patient. The objective resemblance of the lesions could be demonstrated in a number of photographs of such cases, which he would show at the next meeting.

DR. ELLIOT thought that the case looked very much like one of arsenical dermatitis. He had observed a number of such cases occurring in the employees of a Paris green factory. For these the bullæ appeared on the hands, and also on the scrotum and penis, in the latter place owing to the contact of the parts with the hands during urination. The patients got well very quickly as soon as they stopped the work, but relapse followed a return to work.

DR. PIFFARD considered the affection a disturbance of nutrition from exposure to cold; he had observed the appearance of bullous forms of chilblains before.

DR. SHERWELL mentioned that he once attended a number of stevedors who had worked with bare feet in the hold of a vessel in which a barrel of white arsenic had been broken and the contents scattered around. They all had similar lesions on the feet, and some on hands, in same site, having imperfectly cleansed them at the interdigital space.

Reports on Cases Presented at Former Meetings.—DR. LUSTGARTEN reported that the erythema of the patient presented at the 220th meeting had disappeared, even pigmentation being hardly visible any longer. The last medicine given was atropine, up to 4 milligrams per diem—the highest dose the patient could stand—but the disease had shown a tendency to improvement before atropine medication had been started.

DR. PIFFARD called attention to the importance of the discovery of two different species of trichophyton, reported by Wickham in a letter in the *British Journal of Dermatology*, the trichophyton microsporon growing everywhere on the body after transplantation, while the trichophyton microsporon was found only on the heads of children and proved much more obstinate. On his motion the Secretary was requested to communicate with the author and try to secure some specimens from him.

THE NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY, TUESDAY EVENING,
FEBRUARY 14, 1893.

DR. SAMUEL ALEXANDER *in the Chair*.

Report of a Case of Prostatic Calculi.—DR. J. R. HAYDEN presented a number of calculi which he had removed from the prostate of a man during

a post-mortem examination. The man was about 58 years old; he had died at the Almshouse on Blackwell's Island, and no clinical history of the case was obtainable. Between thirty and forty stones were removed, most of them being found in the substance of the prostate.

Report of a Case of Oligospermia Associated with Azoospermia, with Gross and Microscopic Specimens.—By DR. F. TILDEN BROWN.

The case, Dr. Brown said, is of interest because it brings up the question of the source of certain of the secretions making up the semen. A hasty review of the literature on the subject revealed many contradictory statements on this point. This contribution might assist in clearing up some of the mooted points. Semen is a complex substance, made up of the contributions from the testes, from the glands of the vas deferens and those of the seminal vesicles, which are by some authors called the albumen forming glands. A small portion of the secretion is also eliminated by the prostatic ducts and by Cowper's glands. The semen is said by some to be an albuminoid substance; by others it is stated that it contains no albumen. It does not coagulate by heat nor respond to the albumen reaction. Fürbringer states that one of its constituents, the so-called seminal crystals, are derived wholly from the prostate, and that these give to the semen its characteristic odor. Ultzmann does not say positively that these crystals do not come from the prostate, at times, but he shows very clearly that they do come from the seminal vesicles. In his case, Dr. Brown said, there is oligospermia, a diminution in the quantity of the semen, combined with azoöspermia, the absence of spermatozoa. This is not an unusual condition, excepting when it is a congenital one, as it seems to be with the patient in hand. The acquired condition of the absence of spermatozoa in the semen is not at all uncommon, but congenitally the condition is a rare one, and when it does occur it is generally connected with some appreciable malformation of the external genital organs, such as hypospadias or cryptorchidism. Or, in some cases, a non-development or absence of the testes or seminal vesicles may be found. In one case reported there was a lack of continuity of the vas deferens. This patient has been seen by a good many physicians in this country, and by Fürbringer and others on the Continent, and they gave him rather conflicting statements regarding his condition. One said that he found evidences of ill-formed spermatozoa in the semen. Fürbringer first stated that he saw no spermatozoa, and afterwards that he found some partially developed. The condition of the man's external congenital organs is perfect; the only point noticed is that the meatus is rather small. The man is about 32 years old and has been married seven years. His wife has been repeatedly examined and found perfect for conception, and she is very anxious, rather more so than the husband, to have a child.

A rectal examination of the patient shows that the prostate is normal, perhaps a trifle undersized, and the ejaculatory ducts can be felt. When the patient was first seen, he stated that it would require ten days for him to collect a specimen of his semen. At the expiration of that time he brought about two grams of fluid, milky in appearance. It was perfectly neutral, did not respond to the test for albumen, and was not viscid. A microscopic examination revealed nothing but a considerable number of minute granules or corpuscles, averaging about the size of a leucocyte. A small shred was also found, which contained a number of corpora amylacea,

besides a few blood corpuscles and large-sized doubly-outlining cells; the latter, Dr. Brown said, he has found a number of times in inflamed prostates, and he has looked upon it as a prostatic cell of some kind. No seminal crystals were found. The odor of the fluid was characteristic of semen. This last point of observation is inconsistent with Fürbringer's statement that the odor of the semen is dependent on the presence of the crystals, and that they are contained in the prostatic secretion. In conclusion, the speaker said he thought that in this case there is a complete occlusion of all of the genital tract back of the ejaculatory ducts, and that the specimen of fluid that had been examined by him was derived from the prostate and Cowper's glands, and the glands of the urethra.

DR. SAMUEL ALEXANDER, the Chairman, suggested that an attempt be made to squeeze or milk the seminal vesicles, and find out whether the duct is patulous or not. After this is done, the urine passed should be examined for the constituents of semen.

DR. BROWN, in reply to a question, stated that the man gave no history of disease, traumatic or acquired, of the genito-urinary organs. He possesses normal sexual power, but no ejaculation follows the act. He must wait at least ten days in order to accumulate a quantity sufficient in amount to examine. The only vice he has been guilty of is that of cohabiting at an unusually early age, and perhaps doing it to excess while a young man.

DR. E. L. KEYES stated that a progressive scantiness in the amount of semen secreted, is not uncommon in middle life or later, but it is associated with a diminution in the sexual vigor and capacity.

DR. BROWN said that the man's urine passed immediately after coitus had been examined, and contained none of the elements of semen. There was no vesical irritation. The bodies found in the specimen examined, were not leucocytes, but mucous corpuscles.

DR. ALEXANDER expressed the hope that Dr. Brown would report to the Section the further progress of this case.

Presentation of a Series of Interesting Specimens Illustrating Diseases of the Kidney. By DR. HERMANN BIGGS.

The first specimen presented by Dr. Biggs, was the kidney of a woman, twenty-four years of age, who was delivered of a child at full term, eight months ago. Since that time she has never been well, although the history is imperfect as to what the actual trouble was. There had been no suspicion of renal disease. She was feeble, suffered from dyspnoea, and was confined to bed. Upon her admittance to the hospital, a physical examination revealed a double cardiac murmur, and soon afterwards a pericardial friction sound was heard. During the period that the woman was in the hospital (ten days), her temperature was subnormal, with the exception of one day, when it went up to 101. The rest of the time it ranged from 95 to 97. She rapidly grew weaker, and died, apparently, from heart failure. At the autopsy, an acute pericarditis was found, and about six ounces of a sero-fibrino-purulent exudation distended the pericardial sac. There were a large number of petechial hemorrhages into the visceral and parietal layers of the pericardium, and into the myocardium. Numerous infarctions were found in the lungs and kidneys. The kidneys were very small. The spleen was rather firm and somewhat enlarged. The liver, which was not directly concerned in the septic process, was in a curious condition. An old gall-stone had ulcerated

through from the gall-bladder into the transverse colon. The line of ulceration could still be traced, and a probe could be passed through the opening. The gall-bladder contained a large gall-stone, and one very small one. The atrophied kidneys, Dr. Biggs said, were the result of parenchymatous nephritis, probably occurring during her pregnancy. He was unable to explain the subnormal temperature with what was unquestionably an acute pyæmic process.

The next specimen presented by Dr. Biggs, was the kidney removed from a man about forty-eight years of age, who had been found dead in one of the city lodging-houses. At the autopsy, the lesions found were those common in chronic alcoholism: an enlarged, fatty, cirrhotic liver; fatty heart; marked changes in the brain and pia, and in the blood vessels. The right kidney weighed about seven ounces, and was in a state of parenchymatous nephritis. The left kidney contained a large calculus, made up of a number of branching processes, which filled up the pelvis and calices, and extended downwards into the ureter.

The next specimen shown was one of a pair of kidneys removed from a woman seventy years of age, in whom the autopsy disclosed extensive lesions of various kinds. There was a deforming and obliterating endarteritis affecting both the larger and smaller arteries through the body, and in the brain several large areas of softening were found; one in the left occipital lobe involved almost the entire lobe. In addition, there was an acute lepto-meningitis. Changes were also discovered in the heart and lungs. The kidneys were very much scarred, their surfaces being irregular and nodular, owing to the presence of cicatrices; in the kidney there were irregular areas of atrophy, such as are found with extensive obliterating and deforming endarteritis. These atrophied areas are due to the occlusion of the small vessels.

DR. BIGGS next presented a pair of kidneys removed from a man aged sixty-seven years. There was a congenital disproportion between the two glands, one weighing one-half ounce, while the other weighed five and one-half ounces.

The next specimen presented was one of a pair of kidneys one of which weighed fifty-five ounces and the other fifty-eight ounces. They had been removed from a young woman twenty-six years of age who gave no history of renal disease whatever. She entered the Maternity Ward at Charity Hospital and was there delivered of a child after rather difficult labor. Subsequent to her confinement she did not seem to recover. There did not appear to be anything definite the matter with her—at least, nothing was found. Her vitality was much impaired; she was rather stupid and became more so, and finally died. She had no temperature. The history obtained at the time of her admission gave rise to no suspicion of renal disease and examination of her urine showed nothing. The records regarding it, however, were imperfect. At the autopsy, these two large kidneys were found, which are types of the large congenital cystic kidneys. They are made up entirely of these cysts. A number of small cysts were also found in the liver. A microscopical examination of portions of tissue removed from various parts of these kidneys disclose no elements that even approximate those of the normal kidney tissue. The most solid portions show a few irregular, deformed, dilated or atrophied tubules with an occasional atrophied glomerulus. It does not seem possible that these kidneys could have

performed their function at all, and yet she gave no history of renal disease until after the strain produced by her pregnancy. These cases, Dr. Biggs said, have never been satisfactorily explained, either as to their cause or as to the methods by which the excretion of urine is carried on. There certainly is nothing like the normal amount of renal tissue left in these organs: in some cases there seems to be none left at all. In one case that came under his observation one kidney weighed seven pounds and the other eight pounds.

DR. BROWN inquired of Dr. Biggs whether anything is found in the urine in these cases of congenital cystic kidneys.

DR. BIGGS replied that he could not recall any case wherein the diagnosis had been made before death. In one case the enlargement was supposed to be an abdominal tumor.

DR. KEYES said that the cases reported by Dr. Biggs served to emphasize a fact which is well known, and that is, to what an extent derangements of the kidney may exist without being recognized, and without giving rise to pronounced symptoms. This may serve as an excuse for apparent negligence on the part of the physician, on one side, but on the other hand, it also serves as a weighty argument for greater conservatism in connection with surgical procedures for diseased kidneys.

DR. BIGGS said that these cysts were filled with an almost colorless fluid and contained very few cellular elements—a small number of degenerated cells.

DR. E. V. AGRAMONTE, in discussing the first case reported by Dr. Biggs, in which the temperature was subnormal, referred to the fact that in chronic pyæmia we sometimes get a low temperature, with daily variations and chills, as in malaria.

DR. BIGGS stated that his was a case of acute pyæmia. The infarctions in the lungs were very numerous—several hundreds in each lung and of the most acute kind. The abscesses in the kidneys were small, and each was surrounded by a bright, hyperæmic zone. Two or three days before the woman's death, an abscess developed in her lower lip; this developed within fifty-six hours. There were petechial hæmorrhages into the skin of the right arm. He had no reason to assign for her absence of temperature.

DR. KEYES said that a subnormal temperature occurring in cases of more or less pernicious fever and after operation is not very rare.

The Treatment of Suppurating Buboës by Injections of Iodoform Ointment.¹—By DR. W. K. OTIS.

DR. BROWN said that for some time past he has been treating buboës by means of aspiration, irrigation and drainage, both before and during the suppurative stage. For a time he injected rather strong solutions of carbolic acid, but they proved too painful. The injection of a one per cent-solution of the benzoate of mercury has been recommended by a number of European writers.

DR. CHARLES W. ALLEN said that the method of treatment described by Dr. Otis has been in operation at Charity Hospital for some time and has yielded good results. It is used when there is fluctuation. An opening is made in the abscess sufficiently large to remove all the pus; the cavity is then washed out with a 1-1000 bichloride solution and a warm ten per cent.

¹ See page 174.

iodoform and vaseline ointment is injected. A compress is then put on and left there for eight days, as a rule. Iodoform and glycerine (1 to 8) has also been injected, in small quantities, into glands where no pus had yet formed.

DR. H. G. KLOTZ said he has employed a three per cent. solution of carbolic acid in early cases, first drawing out the small amount of pus contained in the abscess, and syringing the cavity. He has also used corrosive sublimate (1-1000) but rarely with good effect. By relieving the tension in such cases, the patient's comfort is greatly increased, even if the bubo goes on to suppuration afterwards. In cases where the infection spreads from one gland to another, Dr. Klotz said, the entire chain is usually diseased from the beginning. This fact he has observed a number of times in connection with so-called strumous buboes, the glands oftentimes being diseased without the skin showing any signs of tension or redness. Several years ago he saw a number of cases in which an emulsion of iodol had been injected into buboes at the German Hospital. In those where only a single gland was diseased the results were very good, but this was not so in the strumous cases. Suppuration went on in the different glands and the patients finally had to be operated on; such operations were rendered more difficult by the adhesions and scars. In strumous cases, excision is the best and only method of treatment. Where these glands contain groups of miliary abscesses, injections, Dr. Klotz thought, would not cure them.

DR. KEYES said he agreed with the statements made by Dr. Klotz. Glands that are obviously tubercular should be early and thoroughly removed by a surgical procedure. Probably iodoform injections would not answer in such cases.

DR. KLOTZ claimed that there is a decided distinction between strumous buboes and tuberculosis. The strumous glands, he said, show a septic invasion and the so-called miliary abscesses are found in them.

DR. OTIS, in reply to a question, stated that he had no case of iodoform poisoning following this method of treatment. The amount of ointment injected into the glands varied with the size of the abscess cavity—sometimes as much as two drams was ejected.

DR. SAMUEL ALEXANDER said that in cases where a number of glands are enlarged or where they are deeply situated, nothing but complete excision will do any good. The cause of many of these buboes is an interesting question, especially those of a more or less chronic character. In some of them we get a history of chronic inflammation just above the membranous junction, or in the prostatic urethra. There may be a small eroded patch or a follicular abscess. Often there is not even a history of strain.

Acidity of Diabetic Urine. DÉRIGNAC (*Archives Générales de Méd.*, p. 218, Feb. 1893.)

In this disease, the total acidity increases with the proportion of sugar, with that of phosphoric acid and that of urea. It always increases at the moment of the appearance of attacks due to the presence of acetones. It constitutes them an important prognostic sign and permits the physician to foresee these attacks and enables him to overcome them by appropriate therapeutics.

Book Reviews.

Diseases of the Skin, Their Description, Pathology, Diagnosis and Treatment, With Special Reference to the Skin Eruptions of Children. By H. RADCLIFFE CROCKER, M. D., London. Fellow of the Royal College of Physicians of London, Physician for Diseases of the Skin in University College Hospital, etc., etc. Second Edition Revised and Enlarged, with 92 Woodcuts. Philadelphia; P. Blakiston, Son & Co., 1012 Walnut Street, 1892.

The speedy call for a second edition of Dr. Crocker's admirable treatise on diseases of the skin is the best practical proof of its favorable reception by the profession.

Although a comparatively brief period has elapsed since the issue of the first edition which was then fully up to date, the author has found it necessary to make an addition of nearly 280 pages to incorporate the new material which represents a distinct advance in our knowledge of skin diseases since that time. The most important new articles included in the present issue are those on erythema induratum, hydroa vacciniforme and recurring summer eruptions, pityriasis rubra pilaris, Morvan's disease, Darier's disease, angioma serpiginosum, angiokeratoma, phagedena tropica, seborrhoeic dermatitis, adenoma sebaceum, actinomycosis and epidemic exfoliative dermatitis.

Among the numerous minor additions we may indicate the articles relating to parakeratosis variegata, acanthosis nigricans, multiple benign tumor-like new growths, multiple demoid cysts, follicular disease of the scalp, folliculitis decalvans, etc., etc. Many of these diseases, it is hardly necessary to say, had no name, or even recognition among dermatologists when the first edition was issued. The valuable contributions which have recently been made to our knowledge of the pathological relationships of many apparently dissimilar diseases and groups of diseases, and which have tended to the simplification of dermatology by the clearing up of obscure points, are fully set forth.

A careful examination of the character and extent of the new material, while illustrating the extraordinary revolutionary rapidity of this department of medicine impresses us with the arduous task imposed upon the author of sifting from the vast accumulations of recent literature the facts and opinions which have a definite value and are worthy of permanent record.

The new illustrations, sixteen in number, portraying original microscopic sections, are executed in the same artistic style which characterized the admirable drawings in the first edition.

In reviewing the first edition we summed up an impression as to the general style and character of Dr. Crocker's book as follows:

"While the work before us necessarily contains much that will be found in other standard treatises on diseases of the skin, yet, in the admirable arrangement of the material, the rejection of useless details, the clear and concise modes of expression, and a certain original but forcible method of treating the various subjects, he has produced a book which, while embracing all essential facts relating to skin diseases, bears upon every page the

impress of the author's independent thought and observation. But, while the work is largely a reflex of the author's individual views and experience, he has not neglected to draw upon the observations and researches of other workers in the same field, the results of which are digested and presented in an available form. Numerous references are made to recent dermatological literature for more extended information upon subjects which cannot be exhaustively treated in the necessarily restricted limits of a text-book. While especial prominence is given to the consideration of the diseases most prevalent in Europe and this country, tropical and epidemic diseases are more fully treated of than is usual in works of this class."

While the introduction of so much new and valuable material and the careful revision of the old is evident on every page, the work has been greatly improved and we have no hesitancy in pronouncing it the best text book on skin diseases in the English language. P. A. M.

Traité Descriptif des Maladies de la Peau. Symptomatologie et Anatomie Pathologique. (Descriptive Treatise of Skin Disease, Symptomatology and Pathological Anatomy). Par MM. HENRI LELOIR et ÉMILE VIDAL. (Livraison, 4 me). G. Masson: Paris, 1893.

A notice of the earlier divisions of this work has already appeared in these pages. The fourth part concludes with the consideration of favus, the authors following the prevailing custom, not attempting a classification. The order adopted is merely alphabetical. As the title leads one to expect, the subject matter is confined to symptomatology and pathology, and it is the latter that gives the book its peculiar value. No effort is made to include all forms of cutaneous disease, Leloir and Vidal apparently confining their attention to those in which their own labors have been prominent. Eczema seborrhoicum is continued from Part III., and is followed by elephantiasis, chillblain, artificial eruptions, the erythemas, multiforme, scarlatiniforme and nodosum, erythrasma and favus. Erythema and favus receive the lion's share of attention. The latter is continued into the next part. The article on eczema, which the seborrhœal form concludes, is altogether the best and most valuable which has appeared up to this time. The accompanying plates are admirable.

Differential diagnosis occupies a part of each treatise, and since it is based largely on the latest researches in minute anatomy, is likely to prove a long-sought guide in this direction. Too much cannot be said of the excellence of the chromolithographs, done in the best French manner, used to illustrate the greater part of the diseases considered. They are exclusively from microscopical sections, somewhat diagrammatic, perhaps, but without doubt, the best we have seen as yet. J. C. J.

Symptomatologie und Histologie der Hautkrankheiten. Von. H. LELOIR und E. VIDAL. (Symptomatology and Histology of Skin Diseases). Leopold Voss: Hamburg and Leipzig. (Parts II. and III).

These are translations by Dr. Eduard Schiff into German of the second and third parts of the French work. The work is well and carefully done, the paper, type, and general appearance are the same as in the other edition, and the plates are identical. Choice between the two can only be a personal one between the two languages employed.

Syphilis and the Nervous System. Being a revised reprint of the Lett-sonian Lectures for 1890. Delivered before the Medical Society of London. By W. R. GOWERS, M. D., F. R. C. P., F. R. S., etc., pp. 131. Philadelphia: P. Blakiston, Son & Co., 1892.

Since the appearance of these lectures some three years ago, in the Medical Journals, two translated reprints have been published.

In this volume, which is their first appearance in book form in English, the author has taken occasion to carefully revise and add to them.

It is needless to say that all the topics are discussed by Dr. Gowers in a scientific and judicial spirit.

If a less optimistic view is taken regarding the prognosis of syphilis of the nervous system than of similar lesions in less important organs, it is due to the character of the tissues involved and the fact that destructive processes are rapidly produced which can only result in permanent injury to the parts.

A gumma of the skin or subcutaneous tissue, which has little significance as far as the future integrity of the parts is concerned, is of vital importance in the brain or spinal cord, resulting not infrequently in permanent damage or starting degenerative changes over which our specific remedies have little or no influence.

Although no one can safely assure a patient that his individual case is absolutely cured, we believe, in the great majority of cases of syphilis properly treated from the beginning, a permanent cure results. The comparative infrequency of tertiary manifestations and the future excellent health and long life of many who have contracted the disease, would scarcely justify the view maintained by the author that syphilis is an incurable disease.

Books and Pamphlets Received.

Traité des Maladies des Voies Urinaires, par H. Picard, Paris : Librairie. J. B. Ballière et Fils, 1892.

Diseases of the Lungs, Heart and Kidneys, by N. S. Davis, Jr., A. M., M.D. Philadelphia and London : The F. A. Davis Co., 1892.

Practice of Medicine: A manual for Students and Practitioners, by Edwin T. Doubleday, M.D. and J. Darwin Nagle, M.D. Philadelphia : Lea Brothers & Co.

On an Epidemic Skin Disease, Resembling Eczema and Pityriasis Rubra, etc., by Thomas D. Savill, M.D. London : H. K. Lewis, 1892.

The Johns Hopkins Hospital Reports, Vol. III., Nos. 1-2-3. Baltimore : The Johns Hopkins Press, 1892.

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- An American Leper, by D. W. Montgomery, M.D. (Reprinted from *Pacific Medical Journal*, April, 1892.)
- Zur Prostitutionsfrage. Von Dr. A. Blaschko. (Sonder-Abdruck aus *Berliner Klin. Wochenschrift*, 1892, No. 18.)
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- Nephrotomy for the Relief of Sudden Total Suppression of Urine Occurring Some Time After Nephrectomy, with the Report of a Successful Case, by Willy Meyer, M.D. (Reprinted from the *Annals of Surgery*, April, 1892.)
- Roser's Sound and Trendelenburg's Catheter-Sound, by Willy Meyer, M.D. (Reprinted from *The New York Medical Journal*, August 6, 1892.)
- Impotency in the Male, by W. Frank Glenn, M.D. (Read at the Fifty-ninth Meeting of the State Medical Society of Tennessee.)
- Abscess Around the Rectum, by Charles B. Kelsey, M.D. (Reprinted from *The Therapeutic Gazette*, January 16, 1893.)
- The Etiology of Itching, by Edward Bennet Bronson, M.D. (Reprinted from the *Medical Record*, October 24, 1891.)
- A Case of Nephro-Lithotomy, with Remarks on the Operation, by Paul Thorndike, M.D. (Reprinted from the *Boston Medical and Surgical Journal*, December 1, 1892.)
- Chancre of the Mouth and the Local Treatment for Syphilitic Manifestations of the Throat, by E. Harrison Griffin, M.D. (Reprinted from the *Medical Record*, October 1, 1892, and August 2, 1891.)
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- Le Favus et la Pelade in France (1887-1892), par le Dr. H. Feulard. (Extrait des *Annales de Dermatologie et de Syphiligraphie*, November, 1892.)
- Quelques Aperçus sur les Dermatoses Prurigineuses et sur les Anciens Lichens, par le Dr. L. Brocq. (Extrait des *Annales de Dermatologie et de Syphiligraphie*, 1892.)
- Des Rapports qui Existent Entre les Alopécies de la Kératose Pilaire et les Alopécies de la dites Séborrhéiques, par le Dr. L. Brocq. (Extrait des *Annales de Dermatologie et de Syphiligraphie*, Juillet, 1892.)
- Chronic Urethritis, by R. W. Stewart, M.D. (Reprinted from the *Pittsburg Medical Review*, December, 1892.)
- Large Cavernous Angioma, Involving the Integument of an Entire Auricle Successfully Treated by Dissection, Free Resection of Diseased Tissue, and Ligation of the Afferent Trunks in situ by a Special Method, by Rudolph Matas, M.D. (Reprinted from *The Medical News*, December 24, 1892.)
- Die Gonococcen im Gewebe der Bartholinischen Drüse. Von Dr. K. Touton. (Seperat-Abdruck aus dem *Archiv für Dermatologie und Syphilis*, 1893.)
- Weitere Beiträge zur Lehre von der Gonorrhöischen Erkrankungen der Talgdrüsen am Penis nebst bemerkungen zur Pathologie des Gonorrhöischen Processes. Von Dr. K. Touton. (Sonder-Abdruck aus der *Berliner Klin. Wochenschrift*, No. 51, 1892.)
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- The Choice between Extirpation and Colotomy in Cancer of the Rectum, by Charles B. Kelsey, M.D. (Reprinted from the *New York Medical Journal* for November, 1892.)
- Some Cases of the Dermatitis Herpetiformis of Duhring, with Remarks on their Aetiology, by George T. Elliot, M.D. (Reprinted from the *New York Medical Journal*, May 28, 1892.)
- The Influence of the Nervous System on Certain Disturbances of the Skin, by A. Ravogli, M.D. (Reprinted from the *Medical News*, August 27, 1892.)
- A Brief Resumé of the Carcinoma-Organism Question, by A. P. Ohlmacher, M.D. (Reprinted from the *Chicago Medical Recorder*.)
- A Problem in Sociology, by E. R. Palmer, M.D. (Reprinted from the *American Practitioner and News*.)
- A Contribution to the Physiology of Sexual Impotence, by E. R. Palmer, M.D. (Reprinted from the *New York Medical Journal*, July 2, 1892.)
- Tests for Sugar in the Urine, by Brandreth Symons, M.D. (Reprinted from the *New York Medical Journal*, July 12, 1890.)
- De l'Impetigo Herpétiforme, par le Dr. William Dubreuilh. (Extrait des *Annales de Dermatologie et de Syphiligraphie*.)
- Trichorexis Nodosa: A Preliminary Note, by Mazijek P. Ravenel, M.D. (Reprinted from the *Medical News*, October 29, 1892.)

- Ein Durch Arsen Geheilter Fall von Sogenannter Allgemeiner Haut Sarkomatose Auf Leukämischer Grundlage. Protozoenähnliche Gebilde (Russells' che Körperschen) in den Haut Tumoren. Von Dr. K. Touton. (Separat-Abdruck Aus den Sitzungsber. der Gesellschaft für Morphologie und Physiologie zu München, 1892, Heft II.)
- Die Dermatitis Herpetiformis (Dühring), und ihre Beziehungen zu verwandten affectionen. Von Dr. Ittmann und Dr. Ledermann. (Sonder-Abdruck aus dem *Archiv für Dermatologie und Syphilis*.)
- Actinomycosis Hominis, by J. B. Murphy, M.D. (Reprinted from *North American Practitioner*.)
- Cases of Favus Contagion from the lower Animals, by S. Sherwell, M. D. (Reprinted from the *American Veterinary Review*, November, 1892.)
- Multiple Sarcomata : History of a Case, Showing Modification and Amelioration of Symptoms Under Large Doses of Arsenic, by Samuel Sherwell, M. D. (Reprinted from the *American Journal of the Medical Sciences*, October, 1892.)
- Some Effects of Blennorrhœa in Women, by James T. Jelks, M. D. (Reprinted from the *American Gynecological Journal*, March, 1892.)
- Comparative Value of Mercury and the Iodides in the Treatment of Syphilis, by James T. Jelks, M.D. (Reprinted from the *Journal of the Am. Med. Asso.* December 20, 1890.)
- Blennorrhœa, by James T. Jelks, M. D. (Reprint.)
- The Second Year's Work in Diseases of the Rectum, at the New York Post-Graduate Hospital, by Charles B. Kelsey, M. D. (Reprinted from the *New York Medical Journal*, March 26, 1892.)
- Some of the Effects of "Withdrawal," by L. Bolton Bangs, M. D. (Reprinted from the *Southern Clinic*, June, 1892.)
- Blood in the Urine—How to Discover its Source and What to Do for It. (Reprinted from the *New York Medical Record*, November 5, 1892.)

Items.

New By-laws. Pan-American Medical Congress.—LANGUAGES : By-law IX. Papers may be read in any language, providing that authors of the same shall furnish the Secretary-General with an abstract not exceeding six hundred words in length, in either of the official languages (English, Spanish, French or Portuguese), by not later than July 10, 1893, and providing further, that a copy of each such paper shall be furnished in either of the official languages, at or before the time of the meeting to the Secretary of the section before which the same shall be read. Remarks upon papers may be made in any language providing that members making such remarks shall furnish a copy of the same in either of the official languages before the adjournment of the session.

PUBLICATION : By-law X. All papers read either in full or by title shall be immediately submitted for publication in the Transactions (Special Regulation 3), but authors may retain copies and publish the same at their pleasure after the adjournment of the Congress.

CONSTITUENT ORGANIZATIONS : By-law XI. All medical, dental and pharmaceutical organizations, the titles of which have been transmitted with

approval to the Committee on Organization or which may hereafter be transmitted with approval to the Executive Committee by any member of the International Executive Committee, each for his own country, shall be subject to election by the Executive Committee, approved by the President, as constituent bodies of The First Pan-American Medical Congress, and each organization thus constituted shall have the right to designate as delegates all of its members attending the Congress, but no such organization shall meet at the time and place of meeting of the Congress as a distinct body; providing, that the Secretary of each such constituent body shall furnish a list of officers and a statement of the number of members of his respective organization to the Secretary-General not later than sixty (60) days before the Meeting of the Congress, and shall forward a list of delegates chosen to reach the Secretary-General before the opening of the Congress.

The Eleventh International Congress of Medicine.—The Eleventh International Congress will be held at Rome from September 24th to October 1, 1893.

Any physician may become an active member of the Congress by fulfilling the condition of membership, inscribing his name, and securing his admission ticket.

The fee for admission to the Congress is twenty-five francs, or five dollars.

It entitles to a copy of the Transactions of the Congress, which will be forwarded to the members immediately after publication.

Dr. A. Jacobi, 110 West Thirty-fourth Street, New York, the Chairman of the American National Committee, offers his services to whoever will direct him to forward both application and fee.

The Brooklyn Dermatological and Genito-Urinary Society.—On the evening of March 11th a dinner commemorative of the first anniversary of the organization of the Society was held at the Germania Club, Brooklyn.

Myositis syphilitica diffusa is treated of by Lewin (*Ann. de la char.*, V. XVI.), who has collected forty-five cases. The condition is usually mistaken for ordinary muscular rheumatism. It occurs a few years after infection with the production of a painless muscular tumor usually without any change in the skin. The muscle (usually a single one), becomes hard, ligneous, causing flexion of the limb and preventing motion on account of pain. The biceps is most often affected though the external anal sphincter, the masseter or some others may be the ones involved. Necrosis and atrophy come on later. Cure is never spontaneous. The author employs mercurial injections, and recommends massage and electricity.

Aleuronat, the albumin bread recently so much exploited in France in the regimen of diabetes, has gone the way of all the substitutes proposed for the staff of life. While coming up to the expectations in a therapeutic sense, it has, unfortunately, a peculiar and disagreeable taste. The latest recommendation is bread made from peanut meal, from which the "oil" has been expressed.

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No. 6

Original Communications.

A CONTRIBUTION TO THE HISTOLOGY OF ONE PHASE OF ECZEMA SEBORRHOICUM.¹

BY

GEORGE T. ELLIOT, M.D.

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THE interest attending the study of the rarer forms of cutaneous disease has to a great extent led to the neglect of many commoner and more ordinary affections, which being most readily recognized and differentiated, are therefore regarded as not worthy of attention, or of investigation, or, on the other hand, the opinion prevails that they are thoroughly known and do not require any further consideration. The result of this tendency is shown by the position occupied by a number of processes, which struggle along under the burden of a multiplicity of names and designations. They stand on the most diametrically opposed footing in the various classifications of authors, and they exist without a shadow of pathological consensus of opinion, their nature having been determined by the shape of a lesion, by the presence of perhaps one clinical symptom, or from the existence of some epiphenomenon alone and not from a combined study of the clinical and pathological changes, which occur in the course of the particular process at any time under consideration. There is perhaps not one other form of cutaneous disease, to which the remarks just made are more applicable than to the one to which

¹ Read before the New York Dermatological Society, April, 1893.

I would call your attention in this paper, and I would, in dealing with it, confine myself more particularly to its histological side than to its clinical symptoms, phases, etc.

The affection in question is that one which, usually occupies the anterior portion of the chest and the back between the shoulders, though sometimes it is found in the axilla and on the scalp, and also over a great portion of the body, with the exception of the face, on which it never occurs. Its primary lesions are minute, red, sharply defined papules, grouped together and capped with a small scale. These papules coalesce and form a ring, which enlarges peripherally, the central portion clearing up and becoming pale red, or yellowish in color, and more or less covered with greasy scales, while the limiting margin is composed of minute papular elevations, which are for the most part excoriated, though sometimes the border of the patch is somewhat infiltrated and elevated and more uniform. In the course of the process, the enlargement of the rings leads to the formation of patches having a polycyclic contour, or they become crescentic, or they represent some other segment of a circle. In my experience the development of this affection is invariably preceded and accompanied by the condition on the scalp, called by authors pityriasis capitis, seborrhœa sicca capitis, the slightest grade of the same disease described first by Unna and later in America by myself (*N. Y. Med. Jour.*, 1891) as eczema seborrhoicum. In literature, we find that the process in question is the lichen circumscriptus of Willan-Bateman, and it became later the lichen gyratus of Cazenave and Bielt and was included by them among the lichens. Erasmus Wilson classified it in the same manner and called it lichen amulatus et serpiginosus. More recently, Weyl treated of it under the name of lichen acnéique, possibly on account of its supposed follicular origin, while Lailler suggests its being a form of follicular eczema by terming it eczema acnéique. It undergoes a new classification and receives a new designation in the first edition of Duhring's book, where it is described as a seborrhœa and is called seborrhœa corporis. His reasons for doing so were that it was always associated with a seborrhœa capitis—the same affection regarded by the writers before Hebra, Sr., as inflammatory in origin and known as pityriasis capitis, and the same as the eczema seborrhoicum squamosum of Unna—and because there was a greasy condition of the surface implicated. Besnier and Doyon in their translation of the first edition of Kaposi stated that in their opinion, the eruption was an ecze-

matiform one, clinically a form of eczema erythematosum. In the second and last edition of the same work, they include it in the eczema seborrhoicum of Unna, regard it as essentially parasitic in origin, and state that for a long time, they, as well as Vidal, had taught that the affection was invariably accompanied by certain forms of seborrhœa and hyperidrosis of the scalp. Following Duhring, Hyde includes the process in the class of seborrhœa, describing it under the name of seborrhœa trunci, while R. Crocker defines it in the last edition of his book, as an eruption associated with seborrhœa and adds still a new name to it—seborrhœa papulosa seu lichenoides. In the first edition of Brocq, we find that it is regarded as a seborrhœa complicated by the presence of numerous parasites, and not a true eczema. Besides these views and designations, there are a number of others, such as the circinaria of Payne, etc., unnecessary to enumerate, which have been applied to this form of cutaneous disease. In 1887, however, Unna made a new departure, claiming that from his investigations the pityriasis capitis—the so-called seborrhœa sicca—was not a seborrhœa at all, but one grade of a process histologically inflammatory in character and pathologically parasitic in origin, and he stated that a most typical phase of this process, when on the body, was this eruption in question situated over the sternum and between the shoulders. He had already shown in a previous article reviewing the question of seborrhœa, that there was not a single support for the constitution of a disease, seborrhœa sicca, and though in his choice of a name for the morbid changes, which he included in his eczema seborrhoicum, there is much to be deprecated and though his earlier statements in regard to the infiltration of the corium and rete with fat, and the accusation that the coiled glands were the especial sources of the fat, may be questioned, nevertheless all credit is due to him for having gathered together and demonstrated the clinical interdependence of many phases of cutaneous disease, previously described as distinct entities and classified in the most various manner.

In a communication read at the Dermatological Congress held in Paris, Unna described the histological changes occurring in the process as representing a cellular infiltration in the superficial layers of the corium, especially about the papillary and subpapillary blood vessels, consisting of round cells and fusiform fixed cells. There was also a dilatation of the blood and lymphatic vessels and spaces. A karyokinetic proliferation of the

stratum spinosum existed, and an alteration of the cells, "entirely œdematous" in nature, which began in the lowest layers of the stratum spinosum, and extended into the horny layer. This œdematous alteration of the cells in the stratum spinosum, etc., Unna considered pathognomonic of eczema seborrhoicum.

As far as I am aware, this histological report of Unna's on eczema seborrhoicum in general is the only one which contains a microscopical examination of the phase of the disease to which this present article has reference. In a previous paper¹, I dealt with the histology of the various forms occurring on the scalp, from the pityriasis capitis of older writers—eczema seborrhoicum squamosum—to the higher moist or dry grades of the process and, in substance, I agreed with the statements made by Dr. Unna, that the clinical symptoms characterizing these various morbid phenomena had absolutely nothing to do with the sebaceous glands, did not represent a seborrhœa sicca as it has been and is still termed, but were the symptoms of an inflammatory process situated in the cutis. Both Unna and myself thus corroborated the opinion held by the earlier writers in regard to the nature of these phases of disease upon the scalp, opinions based upon clinical study and in force, until cast out by the dictum of Hebra, Sr., which classed them among functional diseases of the sebaceous glands, and there they have remained, notwithstanding the attempt made to rescue them from that position by Malassez, Piffard, Auspitz, and others. The same unfortunate classification attaches at present to the form of disease formerly considered to be lichen, etc., but to-day a seborrhœa, to judge by the writings of the more prominent teachers of dermatology in this country and in Europe, but with how much right it is so classed, I will leave you to judge from the description of the histological features which have been found by myself under the microscope.

The portions of the skin, which were examined, were obtained from a patient, a young man, who presented himself with a most exquisite example of the disease upon the chest and between the shoulders. The eruption had been present for about six weeks, had been preceded for some length of time and was accompanied by a very marked condition of pityriasis capitis, and consisted of small primary papular lesions grouped together, of crescentic patches of small size and of large polycyclic areas, scaly, yellowish in the centre, and bounded by a margin composed for the most part of excoriated papules. In other words,

¹ New York Medical Journal, 1892.

he presented typical symptoms of the process. The lesions were, at the time I saw him, excised from the back, both a small primary patch being taken, and also a portion from the advancing border of a large polycyclic area. The patient was then given a 10 per cent. ointment of borophenyl, which removed the disease completely in a week.

The specimens removed were fixed in a bichloride salt solu-



FIG. 1.

INFLAMMATORY CHANGES IN CORIUM AND HYPERPLASIA OF HORNY LAYER IN FOLLICULAR ORIFICE.

tion, in Fleming's solution, and in osmic acid, 1 per cent. Having been mounted in celloidin, the sections were cut and then stained with safranin, hæmatoxylin, and with borax-carmin. The osmic acid sections were examined unstained for the most part, though some were treated with safranin. In the mercuric chloride and the Fleming solution preparations, the corium showed, especially in its papillary and subpapillary por-

tion, an infiltration of round cells about the blood vessels, which were also somewhat dilated (Fig. 1.). The fixed cells in the immediate vicinity of these latter were also considerably increased in number. At certain points, there was a greater massing of cells in one or two papillæ, these points apparently corresponding to the papular like elevations seen clinically on the external surface. The infiltration was not limited to these localities, however, but was also seen lower down in the corium around the ascending branches of the deeper plexus of vessels.

Very much more marked changes were seen in the rete mal-

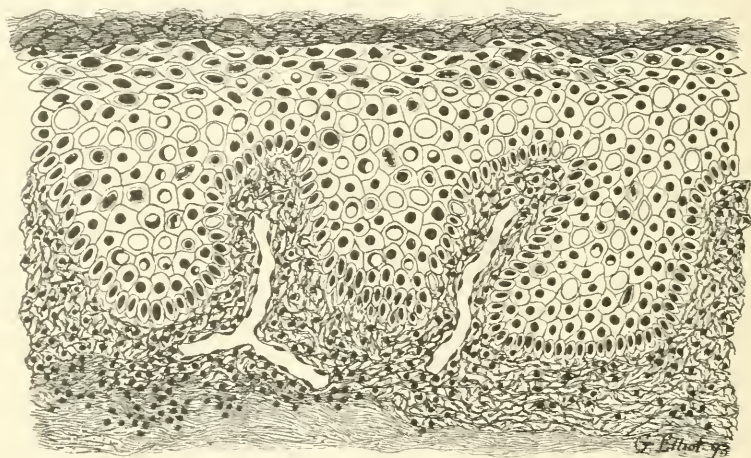


FIG. 2.

DIAGRAMMATIC VIEW OF RETE AND NUCLEAR DEGENERATION IN CORIUM, DILATED CAPILLARIES AND CELLULAR INFILTRATION.

pighii. At certain places, above the papillæ just referred to, and in which a marked infiltration was observed, a considerable degree of complete degeneration of its cells had occurred, so that their general outline and configuration were obscured, their nuclei were only faintly stained by safranin. A number of wandering cells were also seen distributed between the cells of the stratum spinosum, but throughout the entire rete the most peculiar and interesting changes observed were situated in the nuclei themselves. (Fig. 2.) Aside from mitoses, which were present in considerable numbers, there were also in the Fleming solution preparations many variously shaped spaces, though

for the most part round, which apparently occupied the former situation of a cell. These spaces were found in the basic layer of the rete and also throughout the entire stratum spinosum and granulosum, but especially in the interpapillary portions, and in many places the cells of stratum corneum presented analogous appearances. When high powers were used, these spaces were seen, however, to be situated in the cells themselves, to be surrounded by slightly granular protoplasm and to occupy the situation of the nucleus. Their origin could be traced from the study of various nuclei in process of transformation.

Fig. 3. In some cells, the chromatin substance stained very darkly, being apparently massed together on one side of the nuclear body (1), leaving a small clear space on the other. This clear space was found increased in size in other cells (3 and 5).

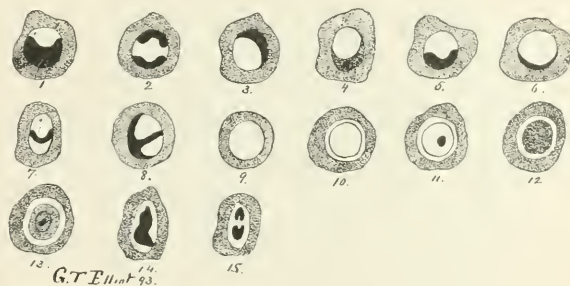


FIG. 3.

NUCLEAR CHANGES IN THE RETE CELLS.

the staining portion of the nucleus being diminished steadily, until only a narrow line (6) could be distinguished, and finally the cell contained nothing but a clear vesicular-like body (9). In some cells, the massing of the chromatin was at both poles (2), or it was only stained slightly, with the exception of one small point (4), or again, it was massed together in the nucleus, forming the most irregular pictures (7 and 8). Besides these, cells containing a vesicular-like nucleus, surrounded by a narrow, clear transparent ring would be seen (10), or, in the nucleus, a small clump of deeply stained chromatin substance remained (11), or figures represented like 12 and 13 were met with. The significance of these two nuclear figures I am not prepared to explain, and mention them only on account of their strangeness. Figure 14 represents the appearance noted in many of the cells,

especially in the upper portion of the rete, and (15), a cell in process of irregular division, a mitosis. There were also other cells in which the chromatin had apparently condensed into a rod-shaped body, or an irregular shape, or had broken up into a number of small pieces. These appearances were not limited to the rete, but were also met with in the rete sheath of the hair follicles, even at some depth from the external surface. The stratum granulosum did not appear to me to be diminished nor increased, except in a few places, and the horny layer was thinned, peeling off and consisting of cells somewhat

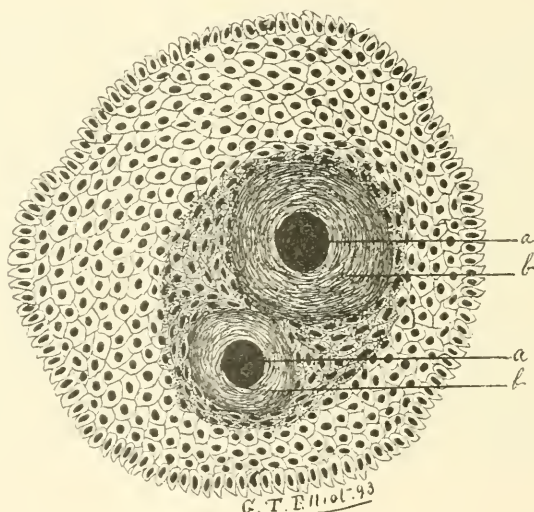


FIG. 4.

CROSS SECTION OF A FOLLICLE BELOW THE RETE. *a a*, HAIR.
b b, EPIDERMIC HYPERPLASIA.

enlarged and containing in places traces of the nucleus still staining well. The loss in preparation of a portion of the stratum corneum was presumable, for the reason that it was much increased in the follicular openings (Fig. 1), and this thickening extended quite a distance downwards into the follicle as may be seen in Fig. 4, which represents a cross section of the hair follicle below the rete.

The sebaceous glands were apparently unchanged in any way in both the mercuric chloride sections as well as the Fleming, and in the osmic acid sections, they were uniformly stained black.

The coiled glands, however, showed very decided changes (Fig. 5). In a large number of them the coils were no longer normal in outline and appearance; they were dilated, the cubical epithelium lining them was absent, and the contour of the cells contained in them was not definable, the appearances being that of a number of nuclei lying irregularly in a mass of granular matter. In a gland, portions were normal, while others were as just described, but many were in toto disorganized and changed. Here and there in some coils, mitoses were found.

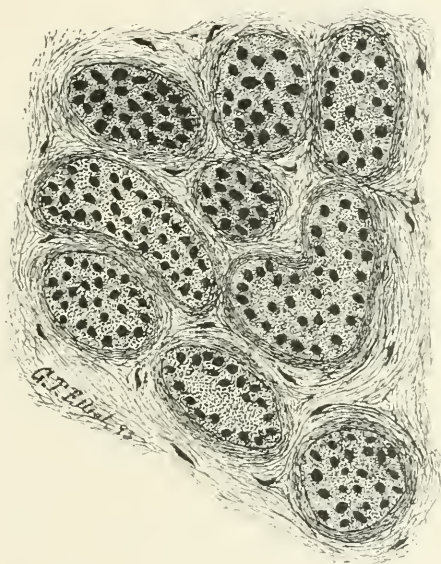


FIG. 5.

DEGENERATED PORTION OF A COILED GLAND.

The ducts presented no pathological changes. The osmic acid preparations were examined with much interest, on account of the claim made by Dr. Unna in regard to the presence of a fat infiltration occurring in the rete and in the cutis in this disease, and he had also expressed his belief that the coiled glands were the source of the fat found by him in the situations mentioned. Notwithstanding careful search, however, I have not been able to find the fat infiltration in any of these situations, and especially not a trace of it in the coiled glands. The fat was found in the sebaceous glands, in their ducts and

in the openings of the hair follicles, and to a certain extent, the osmic acid blackened the horny layer, but nowhere else was it present, except, of course, in the fatty layer of the skin. The changes met with by me in my sections may thus be seen to be substantially the same as have been described by Unna. We only differ in regard to the infiltration of fat in the tissue and in the origin of the vacuole formation in the rete. The investigations of both of us, however, agree in the important fact that the process is an inflammation of the skin, one accompanied by the usual symptoms accompanying a dermatitis. As I have mentioned, Unna would make the peculiar vacuole formation in the rete pathognomonic of this form of disease, but I cannot agree with him in this particular, for the reason that I as well as others have met so frequently similar changes in the cells in many other inflammatory processes totally different from eczema seborrhoicum. But yet they always occurred in affections in which the major changes were situated in the rete, and the suggestion is therefore given that the nuclear degeneration may be indicative of epidermoidal disease, but I cannot regard it in any way as belonging particularly and especially to the form of disease in question.

In addition to the changes in the rete, I would also call attention to the epidermic hyperplasia in the follicular openings, the scaling off of the horny layer and the disorganization of the sweat glands. In view of the changes in the stratum corneum, they cannot but bear conclusive testimony to the fact that the scales met with are epidermic and not imperfectly degenerated cells from the sebaceous glands. The scaling and splitting off of the horny epidermis can be seen to occur between the follicular orifices in the most evident manner, and that there should be some fat mixed with them, or that they should be impregnated with fat, is absolutely no evidence or indication that these squamæ owe their origin to the sebaceous glands. On the contrary, it is merely an evidence that the function of the sebaceous glands has not ceased, but continues in force. Normal epidermis scales examined in the same manner as these pathological ones, would likewise show fat impregnations, and it might be then argued, with equal propriety, that they are also the result of a seborrhœa sicca, for there is absolutely no argument brought forward in support of that theory, except the presence of fat in the scales. No one has ever demonstrated that the cells of the sebaceous glands in these affections did not undergo complete fatty degeneration, but were extruded

upon the surface as horny cells impregnated with fat. No one has ever seen and made mention of such cells being found in the ducts of the glands. No one has ever, except by a statement of personal belief and without, however, any proof, shown that there was a dry flow of seborrhœa any more than that there was a dry stream of running water, but, nevertheless, the perpetuation of that cabinet of monstrosities as regards classification, that parades in dermatology under the designation seborrhœa sicca is kept up, and we find included in it such irreconcilable pathological entities as cutis testacea or keratoma diffusum intrauterinum, verruca senilis, pityriasis tabescentium, etc., and this polynomenclatured disease upon which this paper is based, and that classification is adhered to, notwithstanding that the pathological changes present in the skin in these various processes are entirely different in many instances, do not bear the remotest relation to the sebaceous glands in any of them, except in so far as a seborrhœa oleosa may exist as a complication and even in one—the keratoma diffusum—these latter have been shown to be only slightly developed or, in a great part, wanting altogether.

It appears to me perfectly pertinent to refer in this manner to seborrhœa sicca in general, inasmuch as it has been already mentioned, most of our authorities include in it to-day the form of disease known under the diverse names recorded in the beginning of this paper. The result of the personal examination and investigation by both Unna and myself of the tissues implicated show, however, that even the primary lesions of the process are inflammatory in character, that is, that the pathological process, which gave them origin, was inflammation and not a disturbance in secretion. On the other hand, the argument is advanced that the symptoms of inflammation are not an integral feature in the process, but secondary and due to the irritation of the fat secreted which decomposes and becomes rancid. I fail to see any basis for this argument, when I consider the development of the earliest lesions, which bear all evidences of being inflammatory in character and which arise, without there having been any fatty matter present to become rancid. The greasiness is in reality seen only after the extension of the disease has occurred, is found only in the squamæ resulting from the inflammation of the cutis and is, moreover, not a constant factor, for many cases have been seen by me in which the fatty character of the scales was wanting, the affected surface being dry or only normal in the degree of secretion present.

Unna would have it, that there is a fatty infiltration in the tissues and that the source of this fat is the coiled glands. I cannot, however, agree with him on this point, for notwithstanding repeated investigation, I have never been able to find either fatty infiltration in the corium or in the coiled glands. At the most, I have found in some instances, a blackening of the upper portion of the rete from the osmic acid, but was this fat alone or not, I find it difficult to say. Certainly in this present case, there were no more evidences of fatty impregnation of the tissues than would be seen in sections of skin from any portion of the body rich in fat glands, and that there was a considerable disorganization of the coiled glands in the affection, is only an evidence of their participation in the process, but not necessarily in the line of excessive fat production. This same disorganization of the coils has been met with by me in sections of seborrheic eczema patches from the scalp, but in neither those nor in the present case were there any evidences of fat discovered.

The disease of which we are treating being, according to my opinion, an inflammatory one and not a disturbance in secretion, the cause of its development is of great importance. Personally, I have nothing to say in regard to this side of the question, though in common with the majority of observers, I would consider the primary cause to be a parasitic one, the parasites of which are yet to be demonstrated, but which I am confident will be demonstrated. My belief is founded upon clinical grounds alone, it is true, and definite proof is still wanting for its being regarded as a certainty, but, nevertheless, its mode of behavior and many other factors already mentioned by me in another paper on eczema seborrheicum, have led me to regard the process in that light.

The questions of the classification and nature of this eruption are also of much importance. For my part, I unhesitatingly regard it as a clinical phase of that cutaneous disease to which Unna has given the name eczema seborrheicum. The name is not of any consequence, for as long as the pathological process meant by it is understood, any name will do, but I mention the fact for the reason that in almost every discussion on the subject, the best efforts of the discussers have been expended in condemnation of the name, and the question of the existence of the process has been left untouched upon.

My reasons for regarding the various forms of disease included under that name as only parts of one process have been

given in a paper on that subject in the *New York Medical Journal* in 1891 and do not need mention again, but, I would in addition, refer here to some facts mentioned by other observers in regard to that particular form of the process with which we are dealing at present, which certainly serve to emphasize and corroborate the position taken already by myself. Dühring, for instance, particularly mentioned the occurrence of a "seborrhœa" capitis in invariable connection with the disease on the chest and back and hence called the latter seborrhœa corporis; Besnier, Doyon and Vidal also always observed and taught that fact; Brocq, Radcliffe Crocker and others all acknowledge the association, connection or whatever you wish to call it, between the morbid symptoms on the scalp and those on the chest, etc. For them the symptoms on the scalp are a seborrhœa, that is, they retain in regard to it the opinions of the Vienna school, which I have already mentioned, were based simply upon the presence of fat in the scales. Now, both Unna and myself have shown that the so-called seborrhœa sicca of the scalp was not a seborrhœa at all, but the objective manifestation of a superficial inflammatory process, in which there not being a cessation of the function of the fat producing glands, fat was naturally found. Piffard, Malassez, McCall Anderson and all the older writers regarded this condition of the scalp in this same manner, and if we consider the question upon these facts, the conclusion is that the difference in opinion which exists, is simply whether the process is a seborrhœa or an inflammatory one, not whether they are connected together or associated together, because that is practically conceded and accepted. Now, since from my own studies, and also from those of others, the eruption, both on the scalp and over the sternum and back, is an inflammation and in no way a seborrhœa, the prime article in the difference of opinion between the supporters of the two sides is, for myself, decided against seborrhœa, but we agree as regards the remaining articles, that is, we both regard the lesions on the scalp and on the sternum, as being parts of one process, only differing in our conception of their pathological significance and nature. In other words, I agree entirely with those authors, who, making the process a seborrhœa, believe that the lesions on various parts of the body are phases of one disease, only for myself this disease is an inflammatory one and not a disturbance in function of certain glands.

Is it an eczema or only a dermatitis? In the strict sense of

the term *eczema*, as used by the English, who require a vesicle as the primary lesion for the constitution of *eczema*, in that of the Vienna school, which makes the same requisite, the eruption is not an *eczema*. But does that preclude the fact that it may be a cutaneous catarrh? does a voluntary assertion limit a disease to this narrow definition alone? On mucous membranes, we have a moist, a purulent, a dry catarrh, and why should we not have the same on the skin? We see many clinical pictures, termed *eczema rubrum* beginning without vesicles, pustular and impetiginous *eczema* with only pustules; squamous *eczema* with only redness, thickening and scaling, and personally I see no argument whatever to exclude from the category of cutaneous catarrh the eruption called *eczema seborrhoicum*. Histologically, they are both inflammations of the skin, and though in an *eczema* from irritation or other cause, the vesicular formation may be very manifest at first, yet in its later stages these lesions are more evident from their absence than from their presence. Moreover, in the *eczema seborrhoicum* of Unna vesicular formations do occur, as I have shown under the microscope to several of the members present, and also, clinically, in a case presented before the Society some years ago, in which, on the hands and on other portions of the body, there were numerous vesicles and even bullous formations. I have also so frequently seen in the *eczema seborrhoicum* moist exuding patches, the fluid of which was sticky and catarrhal in character, that I confess to my inability to appreciate the arguments brought forward against the inclusion of the process in the category of cutaneous catarrh, except upon the basis of individual preference and bias. In conclusion, I would state that from my study histologically, pathologically and clinically of the phase of *eczema seborrhoicum*, which occurs especially over the chest, the process is:

1. Not a seborrhœa, but an inflammation of the skin, in which the presence of fatty hypersecretion, often seen, is not an integral but a secondary or accidental symptom.

2. That it is a part of the process termed *eczema seborrhoicum* by Unna.

3. That this process can justly be considered as a form of cutaneous catarrh, probably due to the local action of certain micro-organisms—a form of parasitic *eczema*.

7 West Thirty-first Street.

UROGENITAL BLENORRHŒA IN CHILDREN.¹

VULVO-VAGINITIS IN GIRLS—URETHRITIS IN BOYS.

A Clinical and Bacteriological Study.

BY

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CLASSIFICATION and *Symptomatology*.—Specific gonorrhœal inflammation of the genital tract in young children, girls and boys, has of late become the subject of renewed study. It has been pointedly shown in most recent brochures, Epstein and Cahen-Brach, that the condition seen so often in large clinics in young girls and boys, is really a gonorrhœal one, and should be treated from that standpoint. The data upon which such conclusions are based, are identical with those which are brought to bear upon the diagnosis of urethral or vaginal discharge in the adult. The publications of Pott, von Dusch, Spaeth, which first placed the so-called vulvo-vaginitis of small children and young girls among the gonorrhœal affections naturally met with a degree of silent opposition. It may, in the writer's experience, be classed among the common affections of childhood. The cases which are recorded in this paper, are by no means the experience of the author, but they are simply the experience of the last six months. They record the cases as they come in rotation, and give a good picture of what we may learn from a study of this affection. During the past six years the writer has seen more than two hundred mixed blenorrhœas of the genitals (girls and boys) in children. The present paper will include some interesting data on contagion. All the authors who thus far have studied this affection have, with the brilliant exception of Epstein, failed to acquaint themselves with the conditions, symptomatic and bacteriological, present in the normal vagina and urethra of children who were not suffering from abnormal discharges. It certainly bears directly upon the understanding of the specific catarrh, and justifies a classification of urogenital blenorrhœas, which will be adopted in this paper. Epstein has shown that in the new-born infant there is a discharge which is anatomically and physiologically normal, an

¹ The title "urogenital blenorrhœa" has been adopted as proposed by Cahen-Brach being more elegant and correct anatomically than the old term of vulvo-vaginitis.

adhesive discharge from the vagina, consisting of epithelial cells, and micro-organisms. The introitus vaginæ in these children is not reddened, swollen, or in any way inflamed. In a few days after birth this normal discharge may become yellow, or even (in icterus) icteric. If we examine such discharge we find no leucocytes. After two weeks the rose color of the mucous membrane is restored, and the discharge ceases. This he has called desquamative catarrh of the new-born. It is a physiological process. Epstein mentions a simple catarrhal condition of the new-born urogenital tract, and cases of true gonorrhœa of the same tract. Epstein's material being an immense number of new-born children only, he has not described conditions of later child-life. The author of this paper wishes *first*, to describe a peculiar condition of the urethra and vagina in very young female children. The mothers come to the physician and relate that the child complains of pain upon urination or will cry when passing urine. Here examination will reveal a reddened introitus somewhat swollen and exceedingly tender, a few red points, apparently erosions, appear around the hymen and the urethral orifice. This condition is combined with a very slight serous discharge. The surface may be bathed with it or even the labia majora may be moist. This is a peculiar condition, simple in its nature, not, I think, the result of any unnatural interference. Uncleanliness, lithiasis, the adherence of smegma or dusting powders may cause this condition. It is really a primary catarrhal stage, and rarely presents much yellow secretion. It disappears as soon as rationally understood and treated. A *second group* of cases in young girls are the simple catarrhal cases. These children suffer from a scanty or profuse, purulent discharge from the vulva. It may, on examination, be seen to bathe the introitus. It comes from the urethra and vagina, and presents all the features clinically of the next group, but is of an innocent, non-specific nature, though infectious. The *third group* of cases in young girls and babies are the true gonorrhœas. In this set of cases we are confronted with a profuse, yellow or greenish yellow, adhesive, or thin discharge from the urethra and vagina. There is swelling of the mucous membrane, and the urethral opening is bathed in pus, which flows down over the hymenal opening and escapes with the vaginal discharge from the vulva, and dries in crusts upon the labia majora.

The *simple catarrh* of the urethra and *vagina* in children and young girls is not so infrequent, and will be found to present as

stated above, symptoms and physical signs which may confound it with the true gonorrhœal discharges. The urethral opening is swollen and inflamed, the hymenal orifice, the fringe of mucous membrane, is also swollen and very sensitive to the touch. The discharge appears to have the same physical characteristics as the true gonorrhœal cases. It is yellow, thin, greenish or thick and viscid or milky in hue. There is a tendency of such pus to dry on the labia majora, and the whole picture tells of severe local disturbance. The pus examined shows, however, the true nature of this affection. It takes but careful examination to see that microscopically the discharge in these cases is not gonorrhœal. We have desquamated epithelium and leucocytes, bacteria, such forms as rods, cocci and diplococci. These rods, cocci and diplococci may exist in leucocytes, they may also exist upon epithelium cells, but the leucocyte to which our study in this disease is chiefly directed shows in its cell substance a mass of bacteria, we find rods, cocci and diplococci in the same leucocyte. Leucocytes exist, showing isolated diplococci, but with all this we find none of the bacteriological peculiarities common to a specific gonorrhœal discharge of the adult male. The history of such discharges are almost identical with that of the specific gonorrhœal one. A peculiar persistence even with careful treatment, at most a diminution and improvement but still the baffling continuance of the disease which lasts almost the same length of time as the gonorrhœal forms. Treatment may diminish as stated, the discharge, and the peculiar anatomical structure of the parts in the female make this matter easy to understand. I know that in the male adult a non-specific urethral discharge is a rarity, but this does not invalidate the daily experience that in infants and young girls an infectious non-specific discharge is not infrequent. There is in some cases pain upon urination, a frequent desire to micturate, and in one case at least, I have seen the discharge complicated with inguinal bubo. In the non-specific discharge erosions of the introitus also are present, but the appearances in the vagina itself are none the less interesting. Here in the cases I have been able to examine by means of a male urethral speculum it will be seen that the mucous membrane in its folds and rugæ contains a purulent discharge; the cases I have examined did not show erosions in the vagina. The collum uteri was a more pinkish red than the vagina and in the cervix a drop of pus was distinctly visible. The cervix of the uterus itself is therefore the seat of

disease in many cases. We can thus understand how difficult is the treatment and therapeutic disposition of these cases. (Spaeth and Cahen-Brach also Bumm report like appearances.) The many folds of the vagina, the thousands of minute asperities of the cervix uteri all contain myriads of micro-organisms which cannot be reached by our agencies. The urethra which has, I think, erroneously been selected as the point of attack in all varieties of vulvo-vaginitis may be said to have a species of constant natural irrigation through the passage of the stream of urine over the canal. The tendency is therefore in the direction of cleanliness of this simple tube in female children. The vagina and cervix, the small, undeveloped crypts in the same and also the undeveloped crypts (Bartolini ducts) of the introitus all being infected in the simple as well as the gonorrhœal blenorrhœa tend to prolong the disease in both forms, however the simple catarrhal form of vulvo-vaginitis is infectious; by this I mean it may be communicated from child to child. I have seen this in two sisters who slept together and where repeated examination failed to show anything specific of gonorrhœa. The non-specific form may last for months, they may apparently cease and then recur in greater or less severity. I doubt whether any one to-day believes in the scrofulous or marasmic theories regarding these affections, but they may be favored by bad surroundings which invite a definite infection. The methods of infection will be treated of later.

True Gonorrhœas.—The next group into which the cases of blenorrhœa of the urethra and vagina divide themselves is the true gonorrhœa of these parts. Pott, von Dusch, Spaeth, Steinschneider have all described these cases, and lately, Epstein has described gonorrhœa in new-born female infants, and lastly, Cahen-Brach has collated some thirty cases of the disease. In these cases it is most difficult to trace the origin of the disease, which at times becomes epidemic and seems to affect masses of children (Fraenkel). The authors who have busied themselves studying the affection have, with reluctance, some of them admitted the gonorrhœal nature of the affection. The little patients are brought to the physician with the history that the only thing noticed wrong with the child was a discharge from the vulva. All other history is obtained, in girls especially, with the greatest difficulty. Examination reveals a thick yellow, or greenish yellow discharge, which adheres to the labia majora and dries upon them in yellow crusts. The children are, some of them, in perfect health otherwise.

There is sometimes a history of pain upon urination or frequent micturition. There are no buboes, as a rule, but in many cases the inguinal glands may be very slightly enlarged. An examination shows the urethral orifice swollen and reddened, the seat of purulent exsudate, the hymen is much swollen and bathed in pus; there may be erosions. When the patient cries, or if the perineum be pressed upward, a drop of pus exudes from the vagina. If a Tuttle's urethral speculum be passed into the vagina and light thrown into the same by means of a head mirror, it is seen to be the seat of an intense inflammation. Like the vagina of the adult female in gonorrhœa it may be the seat of erosions which easily bleed. The cervix uteri is reddened and bathed in pus, and in the opening of the cervix we find a drop of pus. This cervical involvement I have seen in all the cases I have examined in this way. The pus when examined, either from the vagina or urethra, shows an immense number of leucocytes filled with diplococci which answer in form, size, grouping and stain reaction to the same forms seen in gonorrhœa of the urethra of the adult male. The course of the disease is tedious, and resists most methods of treatment. In many of these cases we have, as in the adult, joint complications and blenorrhagic conjunctivitis.

Etiology.—Most authors who have worked upon the etiology of vulvo-vaginitis in children have been struck by the constant presence of leucocytes in the discharge which are filled with micro-organisms, corresponding in size, form, grouping and stain to what is found in the discharge from the male urethra in true gonorrhœa. The question now is what significance can be attributed to these appearances. I need only briefly refer here to the discovery of a coccus or diplococcus in 1879 by Neisser, its thorough investigation by Bumm with its isolation and tests of virulence by the same author. The attacks of conscientious critics, no doubt, have been directed toward proving the negative value of these researches, so that lately, 1889, Neisser and his pupil, Steinschneider, have taken up the subject of the etiology of gonorrhœa anew. The articles of Neisser and Steinschneider owe their origin principally to the appearance of late of the work of Lustgarten and Manneberg upon the micro-organisms of the normal urethra. The authors last named showed the presence in the normal urethra in addition to other micro-organisms of diplococci which are in form and size so much like those of Neisser, that they asserted, should inflammation occur, they could invade leucocytes and be easily

mistaken for them. They failed, however, to show any real examples of this error in diagnosis and all the mass of critique and matters published subsequently to this paper on the liability of error fails to show how these diplococci of the normal urethra actually were mistaken in certain cases for the real gonococci. Even Bockhard, who published a few cases of non-specific urethritis, failed to show that leucocytes might be crowded with this diplococcus in the manner seen in the gonorrhœal pus. Neisser naturally was again put upon the defensive, and anyone who will study his and Steinschneider's article will admit that both these authors make out a very good case for their gonococcus. To sum up the paper of Neisser in 1889, he says the non-gonorrhœal urethritis of the male is of so infrequent occurrence as to be practically of little importance diagnostically. The form, size, mode of arrangement against each other in pairs, and lastly, the grouping of these pairs in single large masses in cells, the peculiarity of stain by Gram (Roux); the isolation in exceptional cases if demanded by culture, and their capability of producing gonorrhœa when inoculated on the healthy urethra, all tend to show a specific micro-organism. The inoculation tends to prove the etiological connection. He lays stress upon the fact that chronic gonorrhœa, which is contagious, is so by virtue of the gonococcus. The vulvo-vaginitis in small girls, he thinks, is gonorrhœal. In the adult woman, he doubts the existence of gonorrhœa of the vagina and lays the existence of the disease in the urethra and cervix. All this with the evident conclusion that after examination of thousands of cases he has come to rely even on microscopic examination of a specimen of pus as to its gonorrhœal nature must convince the greatest skeptic. Steinschneider also went over the ground elaborated by Lustgarten and Manneberg and found five varieties of diplococci in the normal urethra. He found these so-called or rather *erroneously* called pseudo-gonococci in acute and chronic gonorrhœa, but concludes that in 95 per cent. of the cases the Roux stain gives absolutely reliable results. In 4.6 per cent. other diplococci than Neisser's decolorize. I think most workers who have stained much pus will be inclined to side with Neisser when he says that in skilled and tutored hands a mistake of identity is not possible. Lustgarten and Manneberg picture their normal diplococci on epithelial cells and not in leucocytes. I will show also these pseudo-gonococci upon epithelial cells in *vaginal discharge* of two cases of *simple catarrhal* non-gonorrhœal urogenital catarrh of young children,

yet it would be difficult to mistake them for gonococci. Turning now to vulvo-vaginal catarrh or urogenital blenorrhœa (Cahen-Brach) of young children and girls, it first struck Pott von Dusch, Spaeth that the cells, leucocytes, in the pus of these cases was identical with those found in gonorrhœa of the adult male. Since then this pus has been examined by Neisser,

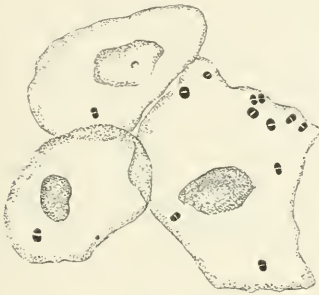


FIG. 1.

SIMPLE VAGINITIS WITH PSEUDO-GONOCOCCI ON EPITHELIAL CELLS.

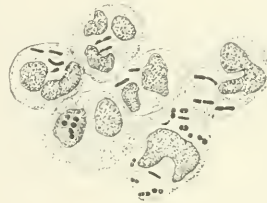


FIG. 2.

SIMPLE VAGINITIS SHOWING RODS, COCCI AND DIPLOCOCCI IN LEUCOCYTES.

Steinschneider (four girls) Widmark, Ollivier, Hirschberg (blenorrhœa and vulvo-vaginitis), Fraenkel, Lober, Kratter, Epstein, Parrot, Deutschman, Martin, Comby, Cseri and myself, all with the uniform presence in the discharge from the vagina and urethra of leucocytes which contain diplococci answering



FIG. 3.

SCHEMATIC DRAWING TO ILLUSTRATE FORMS.

1. Group of pure serum culture diplococci of the normal vagina.
2. Group of diplococci from simple vaginitis, pure potato culture.

in every way to the descriptions of the diplococcus of Neisser. No author has, as yet, to my knowledge, made any attempts to cultivate the gonococcus Neisser, from the vaginal or urethral discharge of these children suffering from gonorrhœal vulvo-vaginitis. Steinschneider has only examined the pus microscopically, as also Epstein and Cahen-Brach. I have made

several attempts, I think, interesting ones, to isolate the gonococcus Neisser from the discharge in children, and beg to direct attention only to the *diplococci* in the *normal vagina* of children and also the *abnormal* condition, which are apt to be mistaken for the gonococcus. In the *normal vagina* of the female child we have a diplococcus which, when stained, resembles closely the pseudo-gonococcus pictured by Lustgarten. It grows upon blood serum in a whitish layer in small, white, beaded colonies. In agar the surface growth is a whitish moist layer and in puncture of gelatin tube there is a white non-characteristic growth. In colonies upon gelatin we have small, round, granular, olive colored by transmitted and yellow-white by reflected light. Some colonies of these diplococci are superficial and golden-yellow by *transmitted* light, whitish by reflected light. It will thus be seen that it might be called a diplococcus albus, and is stained and retains stains by Gram. Turning our attention to the catarrhs of the vagina in children, we have a *diplococcus* which I have found existing alone and in almost pure culture in two cases of non-specific non-gonorrhœal vulvo-vaginitis. This vulvo-vaginitis, as I have cited in the early part of this paper, is infectious, though not gonorrhœal; see Cases IV. and V. (simple). This diplococcus does not decolorize by Gram, it is about the size of the gonococcus. Sometimes it appears slightly larger or smaller. In gelatin we find it grows in superficial and deep light straw colored colonies, whitish by reflected light. The puncture inoculation in tubes is a whitish nail-like formation which, after a time, fluidifies the gelatin slowly. In agar plates the colonies are not characteristic. They are oval, deep or superficial, round and spreading, the deep have a projection on one side. On the surface of agar the growth is enamel white, moist layer, no tendency to luxuriant spreading. In bouillon it causes a general turbidity after twenty-four hours, and after a few days a membrane forms on the surface of the bouillon. On potato we find a luxuriant white creamy layer, moist, raised, no great tendency to spread at sides. In appearance it looks identical with the pseudo-gonococcus pictured by Lustgarten and Manneberg, and in my own cases was seen an epithelium of the vagina. The cases in which it was present will be referred to again. The above diplococcus is also a white diplococcus.

A *third diplococcus* is a micro-organism which I think has, with its fellow, a yellow diplococcus, been mistaken by many

enthusiasts for the gonococcus Neisser and so published. It is always in vulvo-vaginitis to be found in the discharges and grows so luxuriantly that I think it has been the principal agent in baffling my attempts at least to completely isolate the true Neisser coccus. This diplococcus is almost the exact counterpart in form to the true gonococcus. The first diplococcus is white, another is yellow and corresponds to what Bumm has described as the diplococcus flavus. These two diplococci I have isolated from gonorrhœal vulvo-vaginitis. The white diplococcus grows upon potato in a creamy layer almost identical with the pseudo-gonococcus previously described. This creamy layer has a moist appearance, no tendency to spread at the sides. On agar this diplococcus grows in a pearly white layer and the stick in agar is not characteristic. It grows also in gelatin in a whitish non-characteristic stick—fluidifying the same slowly from the top. The yellow diplococcus grows, according to my notes on agar in form of a raised growth with wavy edges at first white and subsequently turning yellow in tint.

I have not used human serum in my attempts to isolate the gonococcus, not having even to-day any free access to human material, but the cow's serum was used, and it is well-known that the diplococcus Neisser grows sparingly on this medium and not as well as upon the serum and agar of Hueppe or human serum. It is not surprising that I only obtained what I think were very restricted gonococcus growths. If we inoculate drops of pus of a vulvo-vaginitis, according to Bumm's method, upon cow's serum, we find after twenty-four hours a fluidification of the serum, a sinking of the area of inoculation into the serum. In these excavations of serum tubes a diplococcus is found which is the exact counterpart of that seen in the crude pus sewn in tubes. If a needle is introduced into these excavations a thin, adhesive tenacious material can be extracted, and in this we find the diplococci mixed with other micro-organisms. By transferring several excavations contents to several tubes we sometimes are fortunate in obtaining a growth in yellow, white or creamy white layer on the serum composed of diplococci most of which *decolorize* with *Gram*. Not having used the plate method of agar serum of Hueppe (Werthheim), these growths were not pure gonococci, and in a few days, generally the fourth serum tube, they were outgrown by the diplococci last described above and lost. The remaining tubes showed diplococci which grew upon agar and gelatin and what was more discouraging did not decolorize with

Gram. These attempts at culture were begun as I stated, in intervals of other work as far back as 1889. This past two years I have again attempted their isolation always using bullock's serum, the result was the same. I think I can say that I had before me the gonococcus upon serum for it decolorized by Gram, but I could not hold it because it was contaminated by the rapidly growing diplococci always growing with it which I think are not specific. I did not use the methods so successfully adopted by Werthheim lately, but none the less it appears to me I would still have greatest difficulty in isolation and selection from this pseudo-diplococcus. Authors and workers have grown so skeptical to-day that if what is true as stated by Werthheim (which Bumm and Neisser do not agree to), that the gonococcus grows upon agar simple and mixed with human or cow's or sheep's serum, only inoculation experiments will in the future convince the critical reviewer that the coccus isolated from any case was the true Neisser coccus and not a pseudo variety. This discouraging outlook, for I could not persuade myself to try such inoculation for simple verification sake, has deterred me from further attempting the more complete isolation of the Neisser micro-organism from urogenital discharges of a gonorrhœal nature in children, while the apparent luxuriance of growth of the above *pseudo-gonococci* is an astonishing result of culture attempts and the difficulty of isolation of the true micro-organism responsible for the affections of the genito-urinary tract of a gonorrhœal nature in children has baffled many observers notably Fraenkel. There can be no doubt of its active part in the etiology. Fraenkel has been successful in certain inoculations and lately Werthheim has been able to isolate the gonococcus in female subjects suffering with affections of the tubes and cause gonorrhœa in the male with pure culture. The various diplococci other than those isolated by myself, have in other hands proved non-pathogenic and incapable of producing gonorrhœa. Epstein attempted inoculation of gonorrhœal pus from his cases upon healthy children with negative results, and concludes from this that there must be peculiar conditions present of the mucous membrane to favor inoculation. To recapitulate in children we find *diplococci* in the normal vagina, in the simple catarrhal forms of urogenital blenorrhœa and lastly in the gonorrhœal forms of urogenital blenorrhœa.

1. Normal vagina, a white diplococcus not decolorized by Gram.

2. Simple catarrhal vulvo-vaginitis, a white diplococcus not decolorized by Gram.

Gonorrhœal vulvo-vaginitis.

3. White diplococcus, not decolorized by Gram.

4. Yellow diplococcus (*diplococcus flavus* Bumm).

All the above diplococci have a form and size apt to be mistaken for true Neisser diplococci, but in the material of over two hundred cases I have not met any case in which these so-called pseudo-diplococci existed in leucocytes alone exactly in the arrangement and disposition of true gonococci. They are found as a rule in pairs of two or four at most, in company with bacilli and simple micrococci or with streptococci in the leucocyte. In a small proportion of cases we find that long exposure of the crude pus spread on cover glass to the Gram method may even decolorize these diplococci as found also in the adult by Steinschneider, but the arrangement and disposition is so different from the true micro-organism as to guard against erroneous conclusions. The modes of staining these micro-organisms has given some workers difficulty, notably Fraenkel. The method pursued by the writer consisted in overstaining with gentian violet in anilin solution, decolorizing with alcohol lightly to find the presence of the coccus and reserving several glasses for Gram stain. At the same time to give good pictures the most satisfactory method has been to spread the pus thinly on cover glasses, heat for some little time on the Ehrlich plate below the 100° C point; after complete drying stain first with a dilute aqueous solution of crystalized eosin and then wash and transfer to a dilute solution in water of Loeffler's menthyl blue alkaline solution. Beautiful pictures can thus be obtained. If stained first with blue and then eosin, the eosin is apt to decolorize the blue stained diplococci, giving very erroneous pictures. I have mentioned these points, having worked them out in many cases. Baumgarten's method of staining intensely with methyl violet and slightly decolorizing with alcohol, also gives good results. I have not tried safranin being so well pleased with the blue and eosin stain. The Gram stain is the differential stain only, and pictures obtained with gentian anilin solution are apt to be overstained and confused. I have obtained with the eosin-blue stain beautiful pictures of the eosinophile leucocytes mentioned by Ehrlich as evidence that we here deal with leucocytes directly emigrated from the blood vessels. Ehrlich has found these leucocytes in cases of gonorrhœa in the adult. I obtained them in my cases of gonorrhœal urethritis of

boys, also in simple and gonorrhœal vulvo-vaginitis. They are simply diagnostic of the truth maintained by Ehrlich, that the eosinophile cells are not artifacts. I have elaborated the simple stain methods in order that others may be aided thereby.

Measurements. The measurements of the *true gonococcus* are 0.8μ to 1.6μ (micro-millimeters) in the long diameter, average 1.25μ and 0.6 to 0.8μ in the line of the interspace.

The *pseudo-gonococci* found in the normal vagina of the child measure 0.8 to 1.24μ (micro-millimeters) in the long diameter, and have a breadth of 0.8μ in the interspace.

The *pseudo-gonococci* found by me in cases of simpler urogenital blenorhœa, have a diameter of 0.9μ (micro-millimeters) to 1.28μ (micro-millimeters) in long diameter, and 0.9μ (micro-millimeters) in breadth at the interspace.

The *pseudo-gonococci* found by me in the gonorrhœas of female children measure 1.24μ (micro-millimeters) to 0.9μ (micro-millimeters) long diameter, and in the interspace the same as the previous pseudo-gonococci.

It will be seen as above, that all these diplococci, when carefully measured, are not only much the same size, but all the measurements are for practical purposes, identical with those of the true gonococcus. It will be also noted that in growth the pseudo-gonococci act much the same in artificial media, and it would be difficult to diagnose them apart from their particular form of disease.

(To be continued)

DERMATITIS HERPETIFORMIS, DERMATITIS PAPILLARIS CAPITULII, AND MORPHEA.¹

BY

HENRY W. STELWAGON, M.D.

Clinical Professor of Dermatology in the Jefferson Medical College, Philadelphia, etc.

DERMATITIS HERPETIFORMIS.—Of this disease only six cases came under observation, representing, with one exception, almost exclusively the vesicular type. The recorded notes of these several cases may be here given:

Case 1.—Man, aged 32, a ship's carpenter, of English birth, first applied to the Dispensary in December, 1881. At that time

¹ Notes from ten years' service (4,131 cases), at the Philadelphia Dispensary for Skin Diseases.

there were patches of vesico-papules and vesicles scattered over trunk, buttocks, and slightly on the face. Previous duration had been six months. The lesions were for the most part grouped in clusters of three and four, here and there two or three vesicles running together and forming irregular small-sized blebs. The itching was intense, and beginning pigmentation of the scratched parts was noticeable. This case was under observation seven or eight years, the skin being rarely, if ever, entirely free. The disease had, however, periods of activity and quiescence. The herpetic character of the eruption was quite a conspicuous feature, but the lesions were mostly small pin-head to pea-sized, a few only at times showing pustular tendency. There was, in fact, never much variation in the type. The general health was good, and there was no apparent cause for the disease.¹

Case 2.—A woman aged 29, a housewife, of Irish birth, presented herself in October, 1884. The eruption, of a markedly itchy character, consisted of discrete and grouped vesicles, chiefly small to large pin-head in size, scattered over trunk, and limbs, especially about the joints; there were also several groups upon the face. The disease had already lasted seven years, but was variable in its intensity. The lesions appeared in outbreaks at intervals, between which, however, the skin was never entirely free. This case was seen but once.

Case 3.—A woman aged 54, a domestic, of American birth, sought advice in July, 1886. The eruption consisted of vesico-papules and vesicles, discrete and in groups of several or more, scattered over trunk and limbs. Previous duration had been eleven years. The eruption was variable, and there were short periods of quiescence. The subjective symptoms of itching and burning were present to a troublesome degree. The case remained under observation but one month; in this time new lesions continued to appear, and the disease failed to show any improvement.

Case 4.—A man aged 43, a millwright, came under notice in June, 1889, with an eruption of papules, vesico-papules and vesicles, grouped and discrete, covering trunk, neck and extremities. Previous duration, thirteen years, with remissions. Four years previously the entire surface was covered with vesico-papules, vesicles and bullæ. This patient remained under the care of the Dispensary one month, in which time no change for the

¹ For a full report of this case see JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES, for February, 1890.

better was noted, new lesions making their appearance from time to time. As no memorandum of general condition was made it was presumably good.

Case 5.—A man (age not recorded), tailor by occupation, of Russian birth, applied for treatment in October, 1889. The eruption was general, consisting of discrete and grouped vesicopapules, vesicles and vesico-pustules, irregularly scattered over face, trunk and limbs. The groups consisted of several small lesions, some tending to become pustular. On palms also were some vesicles, somewhat deep-seated, discrete and in bunches. The eruption was abundant upon the face and scalp; on the former looking not unlike vesicular eczema. Disease dated back two years, when he had an attack in which the brunt of the eruption was upon the hands and feet, on the latter consisting of large pus-containing blebs. Present attack was of four weeks' duration. Itching and burning were prominent symptoms. Under treatment there was temporarily marked improvement, but at the end of several weeks a strong tendency to recurrence displayed itself, and the patient disappeared from observation. The general health was noted to have been good.

Case 6.—A woman, aged 60, of German birth, a housewife, applied to the Dispensary in August, 1890. In this case the eruption covered the left thigh, left arm and the chest, and consisted of irregular circinate and gyrate papules and pale macules, presenting the erythematous and erythematopapular types. The previous duration had been one year. Itching was intense.

Several of these cases were under treatment such a short time that it would be difficult to state positively the value of treatment, as a whole, or the value of individual applications. The constitutional treatment consisted of tonics, more especially arsenic, nux vomica and quinia. As in almost all inflammatory diseases of the skin, saline laxatives given to free purgation brought about temporary amelioration. The most comforting external applications were—liquor carbonis detergens, with several or more parts of water up to the pure solution; liquor picis alkalinus, one to four drachms to the pint of water; thymol lotions, one to several grains to the ounce; boric acid solution, with one of the above mentioned remedies as the active ingredient; and resorcin lotions, one to five per cent. strength. Carbolic acid washes were also beneficial, but not so much so as in eczematous inflammations. The effect of the lotion used was heightened by a supplementary application of a dusting powder. Where an eczematous condition was brought about by

the patient's scratching, and where large areas of closely aggregated or confluent vesicles presented, ointments of a mild character were grateful.

Dermatitis papillaris capillitii.—Three cases of this rare disease were met with, two of which were negroes. The disease in all covered about the same extent of the lower occipital and upper neck region. The notes of the white case are here given: A man aged 39, a ship's carpenter, of American birth, came under treatment in November, 1880. The seat of the disease was the extreme lower part of the hairy scalp posteriorly verging on to the neck. It consisted of discrete and grouped papules, papulo-tubercles and tuberculo-pustules, crowded together, with here and there small interstices of healthy skin. The groups were made up of closely crowded lesions heaped up against each other so as to form large pea to cherry-sized irregular elevations, through which here and there projected single straight or twisted hairs or tufts of hair; in one or two such tufts the hairs pointed in diverse directions, as if each hair were repellant of the other. Some of the larger tubercles and several of the above described groups contained in their depths a small quantity of pus. There were also single lesions which were distinctly sycosiform. The disease had, moreover, especially in some parts, a keloidal aspect. Previous duration had been three years. The subjective symptoms were slight or entirely absent.

The other two cases, as remarked, were negroes; the disease in one being quite extensive, going well up the occipital region. In these two cases the resemblance to keloidal growths was striking, but deep-seated pus formation was also present. In one the disease had lasted three years, and in the other one year. These two cases remained under treatment such a short time as to prevent any estimate of the remedies employed. The first case, however, was under observation six months, and improved considerably under epilation and the constant application of an ointment containing sulphur.

Morphæa.—This rare disease was seen in three cases, brief notes of all of which are here appended:

Case 1.—A woman aged 39, housewife, of American birth, came under observation in June, 1880. On the right side of the breast, on the mammary gland, midway between the nipple and axillary line, was a patch of skin, brownish yellow in color, smooth, somewhat raised; glistening and waxy in appearance, hard and leathery. It was irregularly oval in shape, two and a half inches in its long, and one inch in its transverse diame-

ter. It looked not unlike an inlaid piece of ivory or bacon. At the right border there was a small, tongue-like elongation, extending toward the axilla, and presenting the same characters as the body of the patch. The border of the patch was somewhat pinkish. Sensibility was about normal. It had been coming for about a year, beginning as a small, red spot. Considerable burning and pricking, and at times "burns like fire." Recently she had noticed that the skin of the arm of that side

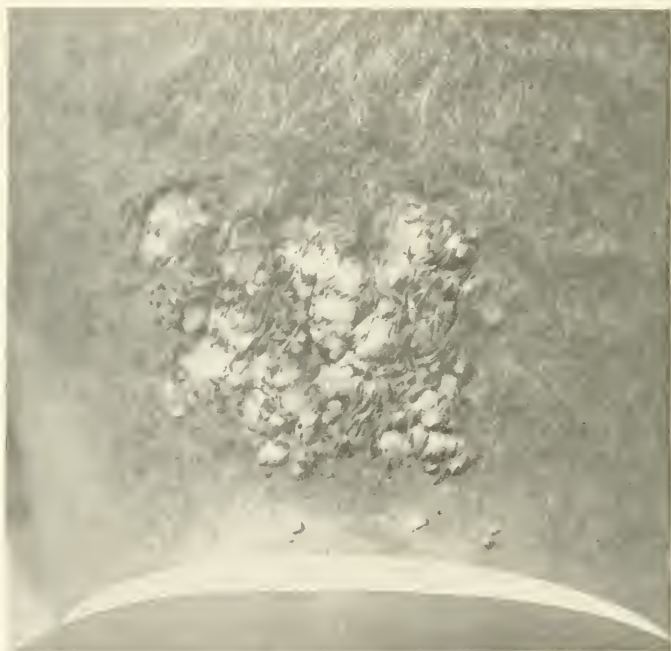


FIG. 1.

DERMATITIS PAPILLARIS CAPILLITII.

was painful at times, but there was nothing to be seen; but on the forearm, on the extensor surface, there was a dime-sized, red, uneven spot, at points slightly hard, presenting, according to the patient's statement, the same appearance as had been originally presented by the patch on the breast. Family history cancerous, but otherwise good. General health was good. Fowler's solution was prescribed in two to three minim doses three times daily. The patient was not seen till some months

later, when she returned to say that she had taken the solution for two months continuously, during which time the disease had begun to disappear, and at the end of three months no trace was left. It will be noted that during the third month no medicine was taken.



FIG. 2.

MORPHEA.

Case 2.—Woman aged 32, millhand, of American birth, applied for treatment in September 1882. On the left side of the face toward the nose, was a quarter-dollar-sized, whitish and hard, ivory-like patch, surrounded with an erythematous halo.

It had begun to make its appearance twelve months previously, its progress being steady but slow; during the past few months, however, it had been apparently stationary. There was no special change in sensibility. General health was good. The case was under observation and treatment one month, treatment consisting of the administration of arsenic. At the end of this time there had been no change in the appearance of the patch.

Case 3.—A woman, aged 40, housewife, of Irish birth, came under notice in February 1887. An examination disclosed a hard, whitish, waxy, inlaid-looking patch on the front part of the leg; oval in outline, long diameter up and down of six to seven inches, and transverse diameter of two inches. It was somewhat hard and inelastic to the touch. Another patch much smaller in size, but of the same general characters, was on the outside of the same leg. There was no marked change in the sensibility of the affected areas. It had been of about two years' duration. The subjective symptoms had been nil. In several parts of the larger patch there was a decided tendency, here and there, to destructive changes. The disease was sharply defined against the healthy skin, by a surrounding narrow band of pinkish coloration or hyperæmia. The case was under observation about one month, the treatment being arsenical. In this time it was thought a slight change for the better had taken place.

Correspondence.

DERMATOLOGY AND SYPHILOGRAPHY IN FRANCE.

New Researches on Trichophytosis.—Our excellent friend and pupil, Dr. Sabouraud, the very distinguished chief of Dr. Besnier's laboratory, continues his observations upon the trichophytions and the results which he has already reached are so interesting and important, that we think we should make them known with a few details. I recall that the first work of this author, a work which I have already announced, established the existence of two varieties of trichophyton tinea, the one characterized by a parasite with small spores (3μ), a parasite of the hair, and only very exceptionally occasioning cutaneous trichophytosis, but being the pathogenic agent par excellence of rebellious tinea tonsurans; the other characterized by a parasite with large spores (8 or 9μ), a parasite also causing tinea tonsurans, but almost always in this case a benign affection and especially constituting the pathogenic agent, par excellence of trichophytic sycosis (trichophytosis of the beard) and herpes circinatus or circinate trichophytosis of smooth regions.

In his second memoir of which I will speak to-day, the author leaves aside the trichophyton, with small spores, and studies only the trichophytic group constituted by the trichophyton megalosporon.

1. *Researches upon the Majority of Trichophytons with Large Spores.*—The pleurality of the trichophytous megalosporous is affirmed by the objective characters of the culture of the parasites. The media of culture of moderate sensibility such as potato, permits us to separate already four or five distinct species and among the most distinct are the trichophytons of animal origin. More sensitive media, such as gelose from the must of beer diluted three to five times, permit us to differentiate types more closely connected with each other, types which might pass for one another on less sensitive media. Taking for points of departure the centesimal composition of diluted must of beer, the author has obtained the best results in differentiation of the species with media containing in a hundred grams of water 3.70 grams of maltose or mannite or lactose, and one gram of peptone. Practical trials simultaneously with the different sugars indicated, have furnished three series of concordant results showing among the trichophytons with large spores a considerable quantity of different species: It is thus the author has been able to differentiate *nineteen species* out of fifty-four cases of different origin.

2. *Researches on the Distinct Specific Nature and the Autonomy of Each of these Types from a Botanical Standpoint.*—Are these nineteen species distinct species or only varieties? This is the question which each one makes to himself in the presence of results so extraordinary and which Dr. Sabouraud has attempted to solve. Without affirming absolutely the definite immutability of their characters, he thinks that these species are fixed. The numerous series of transfers and reinseminations that he has carried out have always left intact for each species its differential primitive characters. The passage of the same series to man and animals has always given back to the culture the same species which served for the inoculation. The accessory proofs of the fixed nature of the species are also given by the contagions in the family which always furnish to the culture an identical species whether these cultures come one or the other patient.

3. *Clinical Researches Affirming that the Polymorphism of Tinea Circinata of the Skin is Connected with a Multiplicity of Trichophytons, or in Other Terms, that each Trichophyton Creates a Lesion of the Skin of Peculiar Aspect and that it Can Create None Other.*—There is, according to the author, direct concordance between the objective form of each circinata trichophytons of the skin and one of the special species which he has described. Thus it is to the trichophyton of the horse that we must refer the lesion long known from an objective point of view under the name of kerion Celsi in infants, the perifolliculitis agminatus of the adult, the circinate sycotic trichophytosis of the beard. The trichophyton of the cat causes a circinate dysidrosiform lesion showing rapid extension. One can thus, at the present time, so far as several isolated species are concerned, make the diagnosis of the special variety of pathogenic trichophyton from the clinical appearances of the lesion. The unexpected multiplicity of trichophytons finds its justification in the clinical facts themselves, all the trichophytic lesions of an individual are always similar to each other because they are produced by the same parasite. The divers cutaneous trichophytosis resemble each other

because their pathogenic parasites are quite analogous. They differ, however, among themselves, because they are not identical.

We used not to insist upon the great value and the extreme importance of these researches which throw the brightest light upon points which had remained till now unexplained, and which were considered as inexplicable. Dr. Sabouraud is pursuing his brilliant researches and we hope before long to be able to speak of the practical applications which he will make of them in the treatment of tinea tonsurans.

Sedative Douches in Pruriginous Dermatoses.—I have already spoken several times of the good effects obtained by Dr. Jacquet in lichen planus treated by hot hydro-therapeutic applications. Along with most dermatologists, we have been struck, at the time of the announcement of the first results of Dr. Jacquet, by the very remarkable sedative action which he had obtained by this method of treatment over the pruritus, and the general nervous excitability. With several other physicians we have also attempted to treat in this way all the nervous and pruriginous dermatoses. We have already employed hot douches in some thirty patients thus affected, and have obtained results which are quite variable, and which we are inclined to attribute to a multiplicity of causes.

1. First and before all, to the difficulty encountered in practice to have hot douches given in the way that one wishes to have them given. We have always sought, in prescribing this treatment, to adhere, as closely as possible, to the formula given by Drs. Jacquet and Materne : tepid douche, at about 35° c. (we order it from 35° to 37°), without pressure given with the sprinkler or broken jet, directed upon the vertebral column for the space of four or five minutes. Now we find that these precise indications have, so to speak, never been met in the hospital establishments where we have sent our patients from the hospital, and that often even the directions are not carried out in the large hydro-therapeutic establishments especially frequented by the class well able to pay. Unless there is incessant supervision, either the jet is too strong, badly directed, or the temperature of the water is not well regulated. When this is the case, the results obtained are either imperfect or decidedly injurious. It is thus seen how this therapeutic measure, which at first glance seems to be of the simplest kind, is, in reality, difficult of application, and how it calls for close attention in order to secure the benefits claimed for it. It must be further added that it cannot, indeed, be carried out except by the relatively wealthy classes in large towns or thermal stations. Struck with these difficulties, we have attempted to replace the douches by lotions made, morning and night, during a period of time which must be determined by the subject and nature of the case. A large sponge wet in a pail of hot water, kept at a temperature of 35° to 38°, is promenaded from thirty seconds to three or four minutes over the vertebral column. The sponge is frequently wet with the water in order to keep up a constant temperature. This procedure is really practical, of little expense, and can be carried out anywhere. It has seemed to give some sedative results which have been appreciable in certain cases of general nervous excitability accompanied by intense pruritus, but we must acknowledge that it has seemed to us decidedly inferior in its action to the real hot water douches.

2. The second principal cause of variability in effects due to the hot douches is their difference of action, even when they are well given, accord-

ing to the subject and to the dermatoses. In this regard we do not know how to approve strongly enough of what Dr. Jacquet has said at the Dermatological Society, in speaking of a new case of rebellious lichen planus cured by hydrotherapy, that we must test the susceptibility of the patient as to the exact temperature and as to the duration of the douche which suits his case. Certain patients require water at 34° ; others at 35° , 36° or 37° . Some are calmed by a douche of one minute, fatigued and put out of sorts by one of two or three minutes. Others demand, on the contrary, douches of four, five and even six minutes' duration, repeated twice a day, in order to feel the sedative effect. In certain persons we succeed better in gradually elevating the water temperature; in others, by ending the douche with a jet of cold water on the lower extremities, etc. Indeed, this therapeutic process is very delicate of application, very complex in its effects, and requires, on the part of the specialist, long and patient researches, in order to arrive at the goal. However it may be, I have already had most satisfactory results with hot douches in certain cases of rebellious pruritus ani, which had resisted all other forms of treatment, and whose intensity was such that the sufferers were deprived of sleep. In cases of generalized pruritus, having begun by outbursts of urticaria and then characterized by dermic alterations corresponding to what we have described under the term lichenifications of a diffuse symmetric abortive variety, the success has also been marked. I have also secured good results in certain pruriginous dermatoses of the type of eczemato-lichenoid eruptions approaching the prurigo of Hebra; but, on the contrary, I have completely failed with other subjects affected with pruriginous eruptions of an accentuated inflammatory type, in neuropaths presenting acute outbreaks on the skin under the form of itching eczema or of multiple acuminate papules, approaching in aspect Unna's lichen ruber neuroticus, and due very probably to insufficient excretion. I have obtained no notable effect in certain cases of localized rebellious pruritus, or in the generalized form seemingly in relation with a marked state of dryness of the skin, growing worse in winter in nervous arthritics. In spite of these numerous restrictions, it is none the less true that the therapeutic means employed by Dr. Jacquet for lichen planus merits trial in many dermatoses of itching nature which appear in neurotic individuals, and in particular in the cases where the nervous excitability is excessive, and where the pruritus manifests itself on the skin by urticaria papules of prurigo and circumscribed or diffuse lichenification.

Treatment of Syphilis.—I have surely not the intention, in this correspondence, to speak to you of the last work of Professor Fournier upon the treatment of syphilis. It is a book to have, and one which one can scarcely analyze. Its appearance has freshened an old quarrel. It is well known that Professor Fournier believes that we must treat methodically and preventively every primary and secondary syphilis. Usually he prescribes to a patient who comes to see him at the beginning of his syphilis, a course of proto-iodide of mercury, in daily doses of six centigrams, to be taken for at least two months. Then this treatment is suspended for a month to six weeks, after which, no matter what has happened, whether the patient has or has not shown new developments, he has him take up the treatment by the proto-iodide again for about six weeks. Then there is a new period of repose for two or three months, renewed administration of the proto-iodide,

new repose, and thus on until the third year of the disease. At this time he gives iodide of potassium in daily mean dose of three grams, during periods of from one month to six weeks, separated by intervals of rest, growing gradually longer as the time from the commencement of the disease increases. His treatment is thus a systematic one, very prolonged and intermittent. On the other hand, there are syphilographers in France, and Dr. Diday, of Lyons, is their venerated chief and dean, who maintain that we must never treat a syphilitic excepting when visible manifestations are present; that we must cease the impregnation with mercury as soon as there are no longer manifestations of the disease, for, according to their view, mercury has no anti-syphilitic action in a preventive sense. This is the method called *opportuniste*.

You can understand how this debate is vigorously contested, and how important a thing it is that the question should once and for all be definitely settled. The appearance of Professor Fournier's book immediately called out the publication of an answer, in which Dr. Diday refutes the arguments of his adversary, and in which he shows, in the most spiritual manner, how, with a little dexterity, one can take the opposite side of any question and make statistics serve the purpose of proving any opinion. After reading most of the documents which have appeared on this point, one arrives at the conclusion, truly deplorable, that one cannot form a firm conviction, and that the two opinions are defensible, although, according to our views, that professed by Fournier seems to repose upon a more scientific base. However, in reasoning from another point of view, it seems to us that, when in doubt, one should not abstain from treatment, since the doses of medicine that are given at the present day are, in the immense majority of cases, in no wise injurious, and they should be continued with; for, if they are omitted, severe accidents may occur, and there will be no excuse.

PARIS.

L. BROCC.

Selections.

The Passage of Fat into the Urine. CHABRIÉ. (*Annales des Mal. des Organes Gén.-Urin.*, February, 1893).

The conclusion drawn by the author from the facts which he has gathered, are, that the passage of fatty substances into the urine may be due to a variety of causes which he tabulates under four heads:

1st. The presence in the blood of a parasite, the *filaria sanguinis hominis*. Investigation has shown here that the function of the kidney relative to the secretion of its normal constituents, is not modified.

2nd. Certain pathological states, and in particular that of a form of Bright's disease. The lipuria is always very light.

3rd. The ingestion of quantities of fat.

4th. Intestinal retention. In this case it is necessary to distinguish between the effects produced by an experimental or pathological ligature in man or in the dog. In the first, a retention of twenty-four hours is sufficient to produce the passage of fat into the urine; in the latter, forty-eight are required. The author's theory is that this form of lipuria is produced by the resorption of bile, and he has produced it by injection of bile into the abdominal cavity of animals. Chyluria may be, therefore, a disease of the liver.

JOHNSTON.

An Improvement on the Otis Urethratome. DR. WALKER (Paris, Tex., *International Journal of Surgery*).

The author offers a modification of urethrotomes and especially of the Otis instrument for greater accuracy in locating the stricture to be cut. A series of bulbs ranging from eight to forty French are made to be screwed upon the end of the instrument. The one corresponding to the stricture being selected and passed the knife is withdrawn, and is sure to have divided the constriction grasped by the bulb. A shaft is also made upon which the same bulbs can be screwed in testing for the structure.

CHARLES W. ALLEN.

A New Irrigating Sound. DR. WILLIAMS (*Med. News*, January 7, 1893).

The writer presents an instrument consisting of a straight metal tube six inches long of 14 F. calibre. To one end is attached a syringe tube; at the other is a female screw upon which are to be attached what are practically bulbous sounds one and a half inches long ranging from 18 to 29 F. The base is bored out so as to be continuous with the ball of the handle. Four openings around the base directed backward serve to give a reflux current. The two objects, dilatation and irrigation, are claimed to be thoroughly carried out by this simple instrument whose use is not advised until after the first or acute stage is passed.

CHARLES W. ALLEN.

Resection of the Urethra. DR. VIGNARD (*Arch. Provinc. de Chirurg.*)

The author looks upon resection as the best mode of treatment in stricture of traumatic origin, giving a radical cure, while temporary benefit is all that can be hoped from other methods. It is especially indicated in impermeable strictures following accident and in well-defined non-dilatable strictures. Fifteen cases are reviewed and they show that the resected ends of the urethra can usually be well brought together and sutured. It is important to unite the soft parts with great accuracy. Drainage is not necessary in most cases but a retention catheter should be left in for six days.

CHARLES W. ALLEN.

A Reaction for Albumin. SPIEGLES (*Annales des Mal. des Org. Gén.-Urin.* February, 1893).

The new reagent which permits the discovery in the urine of albumin when it is found in the proportion of one to 250,000 has the following composition: corrosive sublimate, 8; tartaric acid, 4; glycerine, 20; distilled water, 200. Fill a test tube one-third full with the reagent. Add the urine, acidified with acetic acid, drop by drop, allowing it to run down the tube. When albumin is present, an opaque ring is formed. When the urine contains iodine the ring of albumin is marked by a yellowish ring which dissolves in alcohol. The acetic acid frees the urine of almost the whole of the mucin present.

With this reagent the author has been able to state the frequency of transient albuminuria (twelve to twenty-four hours) after physical and mental activity.

JOHNSTON.

Test for Bile Pigment in Urine. ROSIN—MARÉCHAL (*La Semaine Médicale*, February 17, 1893).

Two or three c.c. of a ten per cent. alcoholic solution of tincture of iodine are carefully poured down the side of a test tube containing the urine to be tested and held very much inclined. If the urine contains any

bile pigment after a minute or so, a fine green ring appears at the junction of the urine with the reagent which may persist for several hours. If no pigment is present, the reagent destroys the color of the urochrome with the formation of a pale yellow or colorless ring, at the point of contact.

JOHNSTON.

Peptonuria in Scarlatina. ARSLAN (*La Semaine Médicale*, February 10, 1893).

Very little notice up to the present time has been taken of the occurrence of peptonuria in scarlet fever. Obermüller was the first to call attention to it: he has since been followed by Heller, Binet and Loeb.

As result of experiments, Arslan has found himself in a position to state that peptonuria is a symptom of the highest importance and one which should be looked for in all cases. Its importance is in prognosis in the early stage of scarlatina. His observations comprise twenty-one cases of scarlet fever in which the urine was examined every day, often twice, while due regard was paid to the other symptoms. In eleven cases in which the disease ran its ordinary course, the urine contained no peptone. On the other hand, peptone was constantly present in the urine of the other ten cases in which various complications occurred. From the above, he believes he can draw the following conclusions:

1. No peptone was found in the urine of mild cases of simple scarlatina.
2. The urine contains peptone in grave cases of the disease, associated with complications, the occurrence of the latter being preceded by peptonuria.
3. The presence of a considerable quantity of peptone in the urine is an unfavorable sign.
4. The peptonuria is in no way influenced by the presence of albumin, the condition of pulse or temperature.
5. In grave cases and in those complicated with gastro-intestinal disturbances, indicanuria becomes superadded to peptonuria.

JOHNSTON.

Affections of the Testicle in Hereditary Syphilis. DR. CARPENTER. (*The Practitioner*, September, 1892).

The author passes in review much that has been written upon this interesting subject and relates many interesting cases, which will aid future investigators in the solution of the difficulties surrounding it. In summing up the present state of knowledge it would appear that:

1. The testicles may be affected so slightly in congenital syphilis that it needs the microscope to detect the malady.
2. In a certain small percentage of cases of congenital syphilis the lesions of the testicle are such that they can be detected by physical examination. These lesions may be present at birth, arise soon after, or make their appearance some months or years afterwards. The general rule, however, seems to be from birth up to two or three years, not often much after this time, and very rarely indeed at puberty. Fournier's case of twenty-four years seems to be the present extreme limit. Syphilitic orchitis may, as has been before remarked, arise when the patient is apparently thoroughly under the influence of mercury, but in this latter respect it does not differ from other syphilitic manifestations.

3. The globe is, more often than not, alone affected, but, not infrequently the globe and epididymis suffer together, and quite exceptionally the epididymis is attacked singly. It appears from Bumstead and Taylor, that the cord may suffer, and in one of Obédénaro's cases it was as thick as a child's thumb. The vas, vesiculæ seminales, and prostate are not attacked : at least so far there has been no record of such a complication.

4. The disease is, very frequently, but not invariably bilateral in its distribution, though one side may be more advanced in pathological changes than the other.

5. Hydrocele of the tunica vaginalis is not such an infrequent accompaniment of the malady as some writers would have us believe, and it may be, in young infants, the earliest indication that there is something wrong with the testicles. In all probability, as time goes on, the fluid is reabsorbed, and then the condition of the gland itself becomes more marked.

6. There is just a possibility that hydrocele of the cord may, in some instances, owe its origin to congenital syphilis.

7. The swelling of the testicle is a painless one, it feels like scirrhus ; it may, or may not, be nodular, the latter for the most part, and a fungus testis is sometimes seen.

8. The enlargement of the affected organ is usually not great, and in fact there may be none at all, it being a very rare occurrence indeed to find in infants and children a testicle the size of an egg.

9. In the large majority of instances the microscopical appearance is that of the simple inflammatory form, passing on to the development of fibrous tissue with consequent destruction of the gland, leading possibly, if not attacked in time by suitable remedies, to impotence and sterility. Certain atrophied organs may be accounted for in this manner. A scrotum, of natural or almost natural dimensions, containing an atrophied organ, the vas, seminal vesicles, and prostate being free, with marks of congenital syphilis on the person, in the shape of scars on the buttocks, fissures round the mouth, characteristic teeth and physiognomy, specific eye troubles, or what not, would suggest such a causation. The inflammatory form is akin to that observed in the liver. Gummata on the other hand are rare manifestations.

CHARLES W. ALLEN.

Benzosol (Benzoil-gaiacol) in Diabetes (*Jour. de Méd.*, April 30, 1893).

DR. PIATOWSKI has obtained good results with benzosol in eight cases of diabetes. In all, the sugar persisted in spite of the exclusive meat diet. Under the influence of this drug, the quantity of urine, the specific gravity and the sugar have diminished (complete disappearance of the latter has not been obtained); the weight of the body has increased and the general condition improved. Benzosol is tasteless and odorless. It is dissolved in the intestine only. In doses of less than four grammes, it occasions no disorder; taken in large doses, it causes diarrhœa.

JOHNSTON.

Items.

AMERICAN ASSOCIATION OF GENITO-URINARY SURGEONS.

The American Association of Genito-Urinary Surgeons, will hold its Seventh Annual Meeting, at the Four Seasons Hotel, Harrogate, Tenn., on Tuesday and Wednesday, June 20 and 21, 1893.

The following papers have been promised :

Report of a case of Papilloma of the Bladder, with Specimen and Drawings. By John P. Bryson, M.D., of St. Louis.

On the Treatment of Cancer of the Prostate by Suprapubic Section, with Parenchymatous Injections of Pyoctanin Blue. By John P. Bryson, M. D.

A Case of Calculous Pyelitis with Complete Suppression of Urine for Seven Days; Relieved by Operation. By Arthur T. Cabot, M. D., of Boston.

A Case of Double Nephrolithotomy. By James Bell, M. D., of Montreal.

Investigations as to the Presence of Lymphatic Nodules in the Normal Bladder and other parts of the Urinary Tract, and the Part they Play in Certain Inflammations, with Specimens and Microscopic Preparations. By Samuel Alexander, M. D., of New York City.

Some Points as to the Diagnosis of Urethral Inflammations. By Samuel Alexander, M. D.

Suprapubic Drainage of the Bladder in the Treatment of Extensive Urethro-rectal Fistula. By Samuel Alexander, M. D.

Long Continued and Permanent Bladder Drainage. By Paul Thorndike, M. D., of Boston.

Abscess in the space of Retzius. By Paul Thorndike, M. D.

Cases Illustrating some of the More Unusual Forms of Urinary Retention. By Francis S. Watson, M. D., of Boston.

Union by First Intention of the Wounds following the excision of Inguinal Bubo. By Francis S. Watson, M. D.

Two cases of Spontaneous Fracture of Stone in the Bladder. By Francis S. Watson, M. D.,

The Practical value of Aero-urethroscopy (with the Exhibition of a new Instrument). By W. K. Otis, M. D., of New York City.

Affections of the Testicle in Hereditary Syphilis. By Robert W. Taylor, M. D., of New York City.

The Rôle of the Posterior Urethra in Chronic Urethritis. By Bransford Lewis, M. D., of St. Louis.

Exhibition of a Genital Dressing Retainer. By Bransford Lewis, M. D.

An Odd Method of Syphilitic Inoculation. By William Judkins, M. D., of Cincinnati, Ohio.

A Contribution to the Pathology of so-called Strumous Buboës. By John A. Fordyce, M. D., of New York City.

An Experimental Study of the Therapeutics of Gonorrhœa. By Edward Martin, M. D., of Philadelphia.

Members of the Association may secure rooms in advance by writing to the Manager of the Four Seasons Hotel, Harrogate, Tenn.



DR. ALEXANDER'S CASE! ENLARGED LYMPH NODULES IN APPARENTLY
NORMAL BLADDER.

JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES.

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NO. 7

Original Communications.

SOME OBSERVATIONS RESPECTING THE HISTOLOGICAL AND PATHOLOGICAL ANATOMY OF NOCTURNAL CYSTITIS.

SAMUEL ALPHEMBER, A.M., M.D.

Professor of Genito-Urinary Surgery and Syphilis, Salomon's Dispensary, New York;
Surgeon to Bellevue Hospital.

IN certain cases of prolonged cystitis there are observed in addition to the usual changes due to chronic inflammation, a number of small nodules in the mucous membrane of the bladder resembling the enlarged villi or cryptic follicles of the intestine. These nodules in the bladder vary in size from a small pinhead elevation to that of a kernel of wheat. Their number and situation likewise vary in different cases. Similar nodules have been observed in the prostate gland in the vicinity of the urethral orifices, but the study of these typhoid formations in the urinary tract has not hitherto excited interest and it is still an open question whether the nodules observed in inflammatory conditions represent a detached part of the mucous membrane of the urinary tract, or are to be regarded as new pathological formations.

Since my attention was first called to the occurrence of these nodules in 1887, I have met with a number of cases in which the nodules were very numerous and of considerable size. The renal inflammation in all of these cases was accompanied by severe pain and by the long duration of the disease, treatment of them were accompanied by frequent and repeated failures.

(Read before the Society of Medical and Surgical Students of the University of Pennsylvania, at Philadelphia, Pa., at the University of Maryland, at Baltimore, Md., and at the University of California, at Berkeley, Cal.)



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SOME OBSERVATIONS RESPECTING THE PATHOLOGY AND PATHOLOGICAL ANATOMY OF NODULAR CYSTITIS.¹

BY

SAMUEL ALEXANDER, A.M., M.D.

Professor of Genito-Urinary Surgery and Syphilis, Bellevue Hospital Medical College.
Surgeon to Bellevue Hospital.

IN certain cases of prolonged cystitis there have been observed, in addition to the usual changes due to chronic inflammation, a number of small nodules in the mucous membrane of the bladder resembling the enlarged solitary lymph follicles of the intestine. These nodules in the bladder vary in size from a small pin-head elevation to that of a large pea. Their number and situation likewise vary in different cases. Similar nodules have been observed in the posterior urethra, in the ureters and in the renal pelves, but the study of these lymphoid formations in the urinary tract has excited very little interest and it is still an open question whether the nodules observed in inflammatory conditions represent a normal part of the mucous membrane of the urinary tract, or are to be regarded as new pathological formations.

Since my attention was first called to the occurrence of these nodules in 1885, I have met with a number of cases of cystitis in which the nodules were very numerous and of large size. The vesical inflammation in all of these cases was characterized by severe pain and by the long duration of the disease, and most of them were accompanied by frequent and repeated hæmor-

¹ Read before the Seventh Annual Meeting of the American Association of Genito-Urinary Surgeons, at Harrogate, Tenn.

rhages. In ten of these cases I performed a supra-pubic cystotomy, and removed the nodules by scraping. The gross appearance of the mucous membrane in all these cases was very characteristic. The superficial vessels of the mucous membrane were engorged and tortuous, and this was especially noticeable during the cystoscopic examinations which were made previous to the operation in several of the cases. In addition to the changes characteristic of chronic inflammation of the mucous membrane, the following appearances were observed:

Scattered over the mucous membrane, especially on the lower portion of the posterior wall and trigone, and upon the lower portion of the lateral walls, there was a great number of elevated nodules, of varying size. These were of a dark red or reddish gray color, and many of them were surrounded by an areola of hæmorrhagic extravasation. In some of the cases nodules were present upon the upper portion of the bladder wall, but were much less numerous than in the lower portion of the bladder. Most of the nodules were discrete, but here and there several nodules were grouped so closely together as to appear to coalesce. The crowding together of these nodules formed larger elevations, and the surface of these was irregular, while the surface of most of the separate nodules was smooth. Some of the nodules situated in the trigone and about the internal urethral orifice had a velvety appearance which proved to be due to the presence of large glands in the mucous membrane. In some instances the nodules were covered with small, villous-like projections, due apparently to an outgrowth of the mucous membrane between the glands, these villi contained no blood vessels and were covered by several layers of cylindrical epithelium identical with the epithelial layers of the mucous membrane. The number of the nodules varied greatly: in one case I counted as many as thirty, scattered throughout the lower portion of the bladder. The nodules were extremely vascular and bled freely from the slightest touch. They were easily removed by curetting, but the bladder wall upon which they were situated bled freely. An examination of the nodules removed was not made in my earliest cases, but those operated upon recently have been carefully studied. The pathological histology of these nodules has been described by Chiari and Pzerowski. Both of these authors observed the post-mortem appearances in a number of cases, and the reader is referred to these writers for a full description. It will be sufficient here to say that the surface of these nodules is covered by three or four

layers of epithelial cells, identical with those in the normal bladder. The surface of the nodules situated in the trigone and about the internal urethral orifice is irregular, due to the presence of the acinus glands, which exist in this situation. The cells covering these nodules however, do not everywhere present a perfectly normal appearance, and the upper layers are entirely wanting over some of the nodules. Frequently there are to be seen enlarged and swollen cells with a granular protoplasm. Here and there between the epithelial cells can be seen a number of leucocytes. Beneath the epithelial layer is an extremely vascular connective tissue, densely infiltrated with cells resembling the ordinary lymphoid cells found in other portions of the body. Immediately beneath the surface in most of the nodules the cells are scattered diffusely. A short distance from the surface are to be seen circumscribed foci, round or oval in shape, which are identical in appearance with the solitary follicles found in the mucous membrane of the intestines. In some of the nodules these circumscribed foci extend up to the epithelial layer, the blood vessels in and near the nodules are very numerous, forming a dense capillary plexus: the capillaries have a very wide lumen, compared with the thickness of their walls. In some instances, there are newly formed blood-vessels, the walls of which are composed of a single layer of endothelial cells. Some of those circumscribed foci of lymphoid cells are in close connection with the larger blood-vessels, surrounding them wholly or in part. These foci have a very sharply defined border, but are not inclosed in a capsule. The cells composing them are round or polygonal in shape, having very large oval nuclei. The nucleus in many of the cells is irregular in shape, and in some few seems to be broken. In the mucous membrane outside the nodules, circumscribed foci of these cells are sometimes found. It will appear, therefore, that these nodules are formed principally of these enlarged lymphoid nodules, and that they are very vascular.

The occurrence of these elevated lymphoid nodules in the mucous membrane of the urinary tract has been noticed by a number of authors, but very few have attempted to explain the pathology and clinical significance of these formations. Arnold's well known investigations demonstrated the presence of circumscribed infiltrations of lymph cells in the mucous membrane of the alimentary canal, the bronchi and the intestines. There has, however, always been a decided difference of opinion in regard to the occurrence of lymphoid tissue in the urinary

tract, and it has been customary, especially in France, to deny that such tissue was a normal constituent of the urinary mucous membrane. The gross appearance of these nodules in the urethra mentioned by Grünfeld, Auspitz and Tarnowsky, has been made more familiar by the use of the modern urethroscope. Guyon speaks of them in the bladder as granulations due to chronic cystitis, but says that their pathological histology has not yet been described. Chiari regards the occurrence of lymphoid nodules in the mucous membrane of the bladder as a new pathological formation, closely associated with catarrhal inflammation of the mucous membrane. On the other hand, Weichselbaum claims that collections of lymphoid cells occur in the normal bladder in the form of solitary follicles and in more diffuse masses, and in support of this he says that he examined the healthy bladders of five young men who had committed suicide, and found, scattered throughout the mucous membrane, circumscribed foci of lymphoid cells resembling the solitary follicles of the intestinal tract, as well as more diffuse masses of these cells. Winkle and Ziegler agree with Weichselbaum in respect to the bladder, and Orth believes that while lymphatic nodules may sometimes occur in the normal bladder, their occurrence is inconstant. He mentions the enlargement of these in chronic inflammations. Pzerowski agrees with Chiari in denying that enlarged lymphoid nodules seen in cases of cystitis are to be regarded as representing a normal part of the mucous membrane. Hamburger has described the occurrence of circumscribed lymphoid follicles in the mucous membrane of the ureters and renal pelves, and mentions similar observations by Egli and Unruh.

From these citations it will be seen how much the opinions of former writers who mention the subject, differ in regard to the questions involved. My own investigations include the careful post-mortem examination of more than fifty bladders, in addition to those cases which I have studied clinically. In most of these examinations the mucous membrane of the entire urinary tract has been examined. In this work I have received much valuable assistance from Dr. George P. Biggs, of New York, who, at my request, collected and prepared most of the specimens. Professor Edward Dunham, of the Carnegie Laboratory, Bellevue Hospital Medical College, has also given very valuable assistance in the preparation of the specimens from two of my clinical cases. The method of examination pursued was as follows: The bladder or the entire

urinary tract was removed as soon as possible after death and carefully examined for any sign of disease. The mucous membrane was then cut into small pieces, which were hardened, and great numbers of successive sections were made from different regions. These sections, after having been stained, were examined with a low power. The lymphoid follicles, when present, can be easily recognized in these sections when stained with hæmatoxylin, as darker points in the mucous membrane, and the larger follicles can be seen with the naked eye, if the slide be held up to the light.

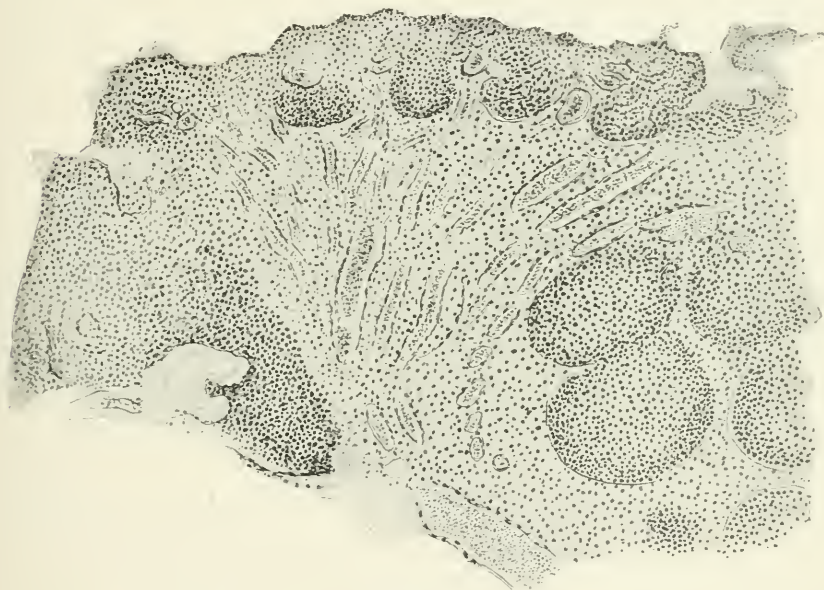


FIG. I.

NODULE REMOVED FROM BLADDER, WITH NODULAR CYSTITIS SHOWING GLANDS AND SMALL VILLI WITH DIFFUSE AND CIRCUMSCRIBED LYMPH FOCI AND NEW FORMED BLOOD VESSELS. CLINICAL CASE.

As a result of the study of these cases, I can affirm that lymphoid tissue is to be found in the normal mucous membrane of the bladder, the posterior urethra, the ureters and the renal pelves, but that the number, size, situation and arrangement of these collections of cells vary in different cases. These lymphoid cells occur in two ways, namely: first, a circumscribed accumulation of cells resembling the solitary follicles of the intestines; second, a diffuse, superficial imbedding of cells,

without definite boundaries. The lymphoid nodules or circumscribed form are round or oval in shape, the long axis being parallel to the surface of the mucous membrane. The follicles sometimes send out off-shoots into the surrounding mucous membrane. (Fig. No. II.) The size of these nodules varies greatly. They are, however, usually visible to the naked eye as small dark points in sections which have been stained by hæmatoxylin. Each nodule consists of a very fine net-work of fibres in which are closely packed round or polygonal cells, with large nuclei. The capillary lymphatic vessels connected with these follicles described by Weichselbaum I have never seen. The follicles are found usually in the upper portion of the mucosa, just beneath the epithelium. In some in-

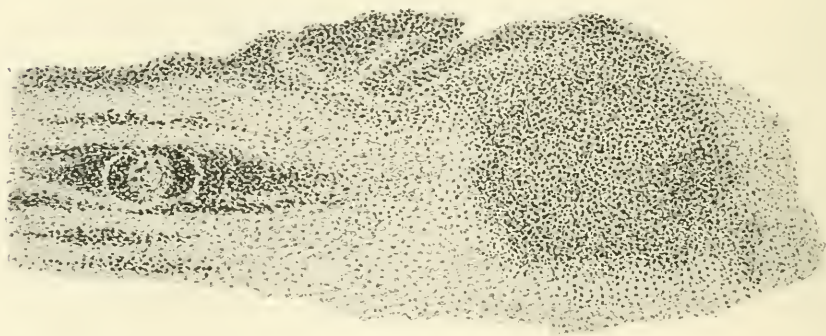


FIG. II.

LYMPH FOLLICLE, LARGE SIZE, FROM BLADDER: ALSO FOLLICLE WITH PROCESSES SURROUNDING BLOOD VESSEL. CASE 2.

stances, however, they are in the lower portion. In many cases the nodules completely surround the large blood vessels like a ring, or they may embrace them only upon one side. In certain situations, especially in the lower portion of the bladder, the nodules completely surround the acinus glands, which are met with in these situations. (Fig. III.)

The diffuse collections of lymphoid cells are likewise always found in the mucosa, very near to the nodules. In some rare instances, I have found these diffuse accumulations of lymphoid cells in the muscular coat of the bladder. The situation of these lymphoid collections in the urinary tract varies greatly. In the bladder they are most numerous in the trigone and *bas fond.* but they are not, by any means, limited to this region. They

are, however, more numerous in the lower half than in the upper. The occurrence of these collections of lymphoid cells in the ureters is not so frequent as in the bladder: when present they are more numerous in the upper than in the lower portion of the ureter. They occur in the renal pelves quite frequently, and also in the posterior urethra. I have found them enlarged in all these situations as a result of inflammation.

The study of these cases has also shown that adenoid tissue in another form is a normal constituent of the mucous membrane of the urinary tract. Acinus or tubular glands, the presence of which has been denied by many authors, are always present in the bladder and posterior urethra, and are met with



FIG. III.

LYMPH FOLLICLES AND GLANDS IN THE BLADDER. CASE 25.

quite frequently in the renal pelves and the upper portion of the ureters. The number of these glands in the bladder, however, is extremely varied. They are situated most frequently in the trigone and about the internal urethral orifice and lower portion of the bladder. In some of the cases numerous racemose glands were found in place of the simple tubular glands which usually occur. The glands are quite numerous and are sometimes of large size, they play an important rôle in the pathology of certain cystites.

Of the fifty-four bladders examined by me, forty-one were apparently normal: the remainder showed more or less evidence of cystitis. Thirty-six contained collections of lymphoid cells, either in the form of circumscribed foci or in more

diffuse masses. Of these thirty-six cases, twenty-eight were normal, and in the remaining eight the mucous membrane was the seat of sub-acute or chronic inflammation. In the mucous membrane of the bladders of eighteen cases no lymphoid foci were discovered. The ages of these patients varied from six months to 78 years. In three of these cases, aged 9, 12 and 15 years, respectively, the bladders were normal, and lymphoid foci were present, and in these cases it is certain that there had been no previous cystitis. In one of the normal cases examined these follicles were elevated above the surface of the mucous membrane. This was a young man, 20 years of age, who died of cerebro-spinal meningitis. No history of a previous cystitis could be obtained, and examination of the urine during life showed a trace of albumen, but no evidences of any inflammatory condition of the urinary tract. In this case the mucous membrane of the bladder was normal in color. Scattered over its surface were numerous grayish-red or grayish-white nodules, round or oval in shape, specially numerous over the trigone and lower portion. Some of these nodules were surrounded by a zone of capillary extravasation. The largest nodules were about the size of a grain of rice. The appearance of this bladder is shown in the colored plate accompanying this article, and the microscopical appearance of the nodules is shown in Fig. No. IV. Sections of these nodules showed that they consist of enlarged lymphoid follicles, resembling in every way those found in the normal mucous membrane, excepting that they are larger. The vessels in the neighborhood of these nodules were greatly engorged, but a most careful examination failed to reveal any evidences of inflammation, either past or present. This case, so far as I am aware, is unique, and while we cannot positively exclude a cystitis at some previous time as the cause of the enlargement of these lymphoid follicles, yet it seems more rational to assume that the enlargement of the nodules was produced by some other cause. In this connection it may be stated that the solitary follicles in the mucous membrane of the small intestines were likewise much enlarged in this case. I do not think that these nodules can be regarded as new pathological formations. A similar condition, but less marked, occurred in case No. 49.

From the facts which I have stated, the occurrence of lymphatic tissue in the mucous membrane of the normal bladder cannot be doubted, and while it cannot be positively asserted that it occurs in all bladders, yet when the small size of some

of the follicles is considered it is quite possible that they may be overlooked when few in number.

I cannot positively state that lymphoid tissue occurs in the mucous membrane of the urinary tract of very young infants; an examination of the three cases which I made was negative, but this is not a sufficient number to decide the question. To deny that lymphoid tissue never occurs in the normal bladder, as does Chiari, is certainly an error. The presence of lymph follicles must be regarded as the rule, and their absence as exceptional. The following table of cases presents a summary of the result of the examination of the bladder in each of the fifty-four cases upon which the conclusions given above are based.



FIG. IV.

NODULE IN NORMAL BLADDER. CASE 2.

There are two theories upon which the occurrence of prominent lymphoid nodules may be explained in certain cases of cystitis.

1. They are new pathological formations due to the peculiar character of the local infection.

2. They represent the normal lymphoid follicles of the mucous membrane which have become enlarged into nodules as a result of the inflammation.

Although I do not deny that it is possible for lymphoid follicles to form *de novo* in the mucous membrane of the urinary tract in certain pathological conditions, as we see occur in the mucous

No	Condition.	Sex and Age.	Cause of Death.	Lymph Tissue.	Remarks.
1	Normal	Present, small number	Cut No. VII.
2	"	.....	.....	Present, large number
3	"	.....	.....	None found.
4	Chr. cystitis calculus.	Fatty heart, nephritis calculus	Present, large number, large size	Long villi.
5	Papilloma at ureteral orifice, subacute cystitis	.....	.....	.....
6	Gangrenous cystitis	Male 50..	Pneumonia, chronic nephritis	Present, small number	
7	Normal	Male 29	Pulmonary phthisis.	None found.	
8	Cystitis, subacute	Male 21..	Violence	Few, large size.	
9	Normal	Male 75..	Fatty heart, chronic dementia	Present, both large and small	
10	"	Male 45..	Chr. alcoholism	Present, moderate number	Colored plate and cuts Nos. IV. and VII. Racemose glands.
11	" ?	Male 20..	Cerebro-spinal meningitis.	Elevated nodules in bladder, pelvis, ureters, posterior urethra	
12	"	Male 40..	Nephritis, chr. alcoholism	Present, small amount	
13	"	Female 20	Typhoid fever.	Few, small foci.	Villi. Pigmentation marked. Villi.
14	"	Male 54..	Nephritis.	None found.	
15	" ?	Female 62	Nephritis, pneumonia.	Present, large numbers.	
16	"	Female 78	Volvulus.	Not found.	Villi.
17	"	Female 43	Abscess of liver.	"	
18	"	Male 50..	Nephritis.	Present, small number	
19	Acute superficial cystitis.	Villi.
20	Normal	Male 50..	Nephritis.	Present, large size	
21	"	Male 60..	Fatty heart.	None found.	
22	Chr. cystitis	Female 21	Pneumonia	Present, large size	Villi. Cut No. III.
23	Normal	Female 33	Puerperal septicemia.	None found.	
24	"	Female 35	Pneumonia	Present, small size, numerous	
25	"	Male 25..	Cerebro-spinal meningitis.	Present, small size	Villi.
	"	Male 60..	Tubercular nephritis	Present, numerous	

No.	Condition.	Sex and Age.	Cause of Death.	Lymph Tissue.	Remarks.
26	Normal	Male 48..	Plithisis	None found.	
27	"	Female 55	Pneumonia nephritis	"	
28	"	Male 37..	Plithisis, amyloid	"	
29	Chr. cystitis.	Female 65	Nephritis	Present, small number.	Villi.
30	Normal	Male 30..	Tuberculous	None found.	Villi.
31	"	Male 20..	Cardiac	Present, numerous.	
32	Cystitis	Female 75	Nephritis	Large size.	
33	Normal	Male 40..	Chr. alcoholism	Small size.	
34	"	.....	.....	Very few	Villi.
35	"	Male 29..	Alcoholism	Large number of all sizes.	Villi.
36	"	Male 9..	Pneumonia	Numerous.	Cut No. VIII.
37	"	Male 40..	Alcoholism	Present, small number.	
38	"	Male 60..	Fatty heart	Small size.	
39	"	Male 68..	Plithisis	Small number.	
40	Cystitis.	Male 23..	Cerebro-spinal	None	
41	Normal.	Male 15..	Pneumonia	Small number.	
42	"	Male 22..	Chr. nephritis	None	
43	"	Male 35..	Cerebro-spinal	Few, large.	
44	"	Male 20..	Cerebro-spinal	" small	
45	"	Male 31..	Pneumonia	"	
46	"	Male 25..	Pneumonia	"	
47	"	Male 56..	Pericarditis	"	
48	Cystitis, calculus vesical and renal	Male 56..	Nephritis pyelitis	Moderate number.	Villi.
49	Normal.	Female 12	Uremia	Great number.	
50	"	Male 21..	Cerebellar abscess	None	Villi.
51	Tubercular cystitis.	Male 25..	Chr. tuberculous general acute peritonitis	Moderate number.	
52	Normal.	Male 1..	Tuberculous general	None	
53	"	Female 2 months	Diarrhoea	"	
54	"	Male Still born	.....	"

membranes of other parts of the body, yet it is not necessary for us to explain the occurrence of the enlarged nodules in the bladder as a result of cystitis in this way.

From a careful and thorough study of the subject, both from a clinical and pathological standpoint, I am led to believe that these nodules must for the most part be regarded as representing the lymphoid nodules of the normal bladder which have become enlarged as a result of disease.

The varying number, shape, situation and appearance of these enlarged nodules in cystitis is so similar to the conditions which we find in the normal mucous membrane, that it is difficult to see how any other view can be sustained.



FIG. V.

NODULE IN POSTERIOR URETHRA. CASE 12.

The occurrence of elevated lymphoid nodules as a result of chronic cystitis is not very infrequent. The number and the size of the nodules, however, is very variable. These points I have verified by repeated cystoscopic examinations in a large number of cases.

The term nodular cystitis should not be used, however, to describe all cases of cystitis in which lymphoid follicles are found, but only those in which the nodules are prominent and numerous. It is in these latter cases alone that the clinical aspect of the disease is peculiar. A few small raised nodules may occur in some cases, but they do not produce necessarily the symptoms which we associate with the cystites in which there

are many large elevated nodules, viz.: pain, hemorrhage, and a decided tendency to relapse.

I have found that in certain cases of chronic cystitis, a decidedly granular appearance is sometimes produced in the trigone and lower parts of the bladder, and also in the posterior urethra, by the swelling up of the tubular and racemose glands. These elevations are, however, much smaller in size than the lymph nodules.



FIG. VI.

TRANSVERSE SECTION OF LARGE NODULE REMOVED FROM TRIGONE BY SUPRA-PUBIC CYSTOTOMY AND GRATTAGE, SHOWING DIFFUSE LYMPHOID ACCUMULATION ABOUT GLANDS, AND SMALL ENLARGED FOLLICLES.

Assuming that lymphoid nodules are a part of the normal mucous membrane of the urinary bladder, but that the size and number of these is not constant, the pathology of nodular cystitis is not difficult to explain, when all the facts are considered.

I believe that in the cases that may be properly included under this title, the elevated lymphoid nodules represent the normal follicles of the mucous membrane which have become

enlarged as a result of inflammation, and that this variety of cystitis occurs in those cases only in which normally there is a number of lymphoid follicles, and does not indicate a peculiar form of infection.

I have met with nodular cystitis as a result of prolonged vesical inflammations, due to a number of different causes. It is not confined to any special clinical variety, nor peculiar to any special period of life. In the majority of well marked cases, some twenty in all, that I have observed clinically, the cystites were due to urethral infection, but I have met with well marked cases in the cystitis of calculus, and of stricture and of



FIG. VII.

RENAL PELVIS -SHOWING LYMPH FOCI. CASE II.

prostatics, and I have also observed the presence of numerous enlarged lymphoid nodules in a case of cystitis due to villous papilloma and in several cases of tubercular cystitis.

The enlarged lymphoid nodules from their close resemblance to new formed miliary tubercles may easily be mistaken for the latter; and that this has occurred I have abundant clinical proof. The size, color, situation and gross appearance is the same in each, and only a microscopic examination can determine whether a given nodule is simply an enlarged lymphoid nodule or a new formed tubercle.

The tubercles, however, undergo degenerative changes which are not a part of the pathological histology of the simple lymphoid nodules. The tubercles become cheesy in the center, and later on abscesses form, while the lymph nodules remain unchanged. Pzerowski has endeavored to show that simple lymphoid nodules may undergo similar changes independently of tubercular infection but I am inclined to believe that he has confused the two conditions.

It is certain, however, that in cases of tubercular infection in which there are normally a number of lymphoid nodules in the mucous membrane, these play an important *rôle* in the disease.

As a result of this specific form of vesical infection, the lymphoid nodules enlarge early in the disease, and Pzerowski states that tubercle bacilli can always be found in these even when they cannot be found in the surrounding mucous membrane.

These lymph nodules may enlarge and become infected directly or indirectly, i. e., from the urethra, or by the urine.

When this occurs the lymphoid nodules undergo degenerative changes in the same manner as the true tubercles, I am convinced that many cases of vesical tuberculosis begin in this way.

The specimen from which Fig. No. IX. has been made, is a nodule removed from a case of primary genital tuberculosis with cystitis, by supra-pubic cystotomy and scraping, the early changes which occur in these cases are beautifully shown.

In the centre of a nodule is an area of necrosis in which the outlines of polyhedral cells are distinguishable, but in which there is no nucleus which can be stained by hæmatoxylin or methylene blue. Here and there, sparsely scattered through this area, are very dense nuclei and fragments of nuclei which stain very deeply, but do not appear to belong to the necrotic cells. Around the area of necrosis there is a zone of cells containing elongated and often very irregular nuclei, for the most part arranged so that the long axes of the nuclei lie radially with respect to the center of the nodule. Beyond this zone is a broader zone of polyhedral cells with vesicular nuclei ("epithelioid" cells) which in turn is surrounded by a dense round cell infiltration. Giant cells with elongated, unusual peripheral, nuclei, are present in most of the nodules, and lie either at the border of the necrotic area or in the zones surrounding it. The giant cells are not spheroidal, often of irregular outline on section.

The tubercles contain no blood vessels, but are surrounded

by a vascular connective tissue which is densely infiltrated with round cells possessed of deeply tinged (hæmatoxylin) nuclei, many of which are irregular in shape and a few broken. The blood vessels in this tissue have very thin walls composed usually of a single layer of endothelial cells. In places where these blood vessels are distended by blood, they appear close together and are seen to possess very large lumina in proportion to the thickness of their walls. The appearance in this specimen is identical with what we should expect to find, as a result of tubercular infection of the normal lymphoid nodules, and that this occurs in many cases cannot be doubted.

The close resemblance in gross appearance at least between enlarged lymphoid nodules and new formed miliary tubercles in

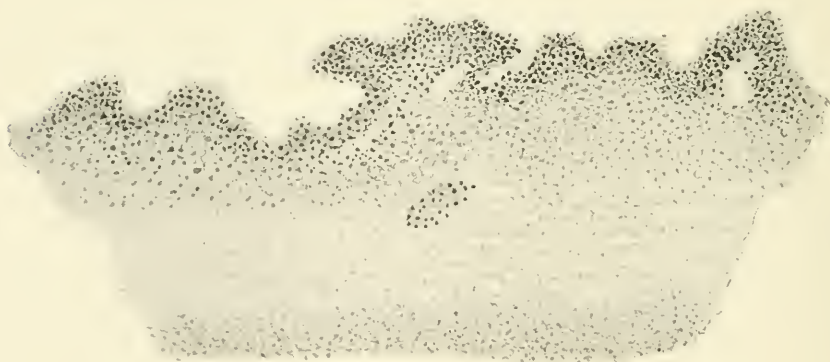


FIG. VIII.

SHORT VILLI IN THE BLADDER. CASE 35.

the urinary tract, makes it of great importance that in operating upon cases in which these nodules are present a microscopical examination should be made of the nodules removed by scraping in order to determine the diagnosis. Pzerowski suggests that the vesical tuberculosis may always begin by the formation of these lymphoid nodules, which he regards as new pathological formations, since the tubercle bacilli can always be found in these nodules before they appear elsewhere in the bladder. But if we believe that lymphoid foci are a part of the normal mucous membrane, we must assume that the bacilli invade these structures first causing them to enlarge, and that the degenerative changes are secondary. This corresponds with what occurs in other parts of the body and is supported by the

facts which I have observed. I cannot state that all cases of bladder tuberculosis begin in this manner, but in those cases in which there are many lymphoid foci in the normal mucous membrane it probably does.

Finally, as a result of my investigations with respect to this subject the following conclusions have been reached :



FIG. IX.

NODULE FROM BLADDER, SHOWING MILIARY TUBERCLE FORMED IN
LYMPH NODULE. CLINICAL CASE.

1. That the lymphoid nodules which occur in certain cystites represent a part of the normal mucous membrane of the bladder, and that the same is true in regard to nodular inflammations of the renal pelves, the ureters and the posterior urethra.

2. That when there are a great number of lymphoid foci in the normal mucous membrane, infection of the bladder, if prolonged, is likely to assume a peculiar type, due to the enlargement of these foci into prominent and very vascular nodules, and that these cystites should be regarded as a special clinical variety, to which the name nodular cystitis should be given.

3. That in cases of tubercular infection of the bladder, in which there are numerous lymphoid foci present in the normal bladder, these become enlarged, and as a result of the special infection undergo degenerative changes which are characteristic of tuberculosis.

4. That the lymphoid foci in the normal mucous membrane vary greatly in size and number, that prominent lymphoid nodules may occur in a bladder apparently normal, and without a previous inflammation, this, however, is very exceptional, and it cannot be positively asserted whether the enlargement of the nodules in these cases is a normal or pathological condition.

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UROGENITAL BLENORRHŒA IN CHILDREN.

VULVO-VAGINITIS IN GIRLS—URETHRITIS IN BOYS.

A Clinical and Bacteriological Study.

BY

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(Concluded from page 230.)

URETHRITIS in boys and young children.—1. There is a simple non-specific inflammation of the meatus urinarius in male children, which is manifested by an eroded condition of the meatus. The child suffers in passing water, because the slight secretion of pus dries on the orifice of the glans penis, and prevents the passage of urine. The urine, when voided, also causes pain. In some cases the meatus alone is eroded, in others, if the glans is pressed, a small drop of pus can be expressed from the anterior part of the urethra. This condition, which might be called simple erosion of the meatus and catarrh of the fossa navicularis, is obscure in its origin. I have often thought it might be caused by an infection in children who crawl about on the ground and thus get filth over the organ, infection being favored by a slight scratch or wound. I confess, however, that this is unsatisfactory, as it has occurred to me to see this condition in babes who cannot crawl about alone. It must be caused by some unnatural interference with the parts by nurses or parents, though not, however, with bad intent.

I have often examined the drop of pus in the cases of simple anterior urethritis, and never found anything but what is found in simple catarrhal processes. Nothing characteristic of gonorrhœa was ever found by me.

2. True gonorrhœa has occurred in a number of male children in my service, and some of the children quite young, one a baby in arms. The symptoms of urethritis in male children give much the picture seen in the adult male, with the exception that the constitutional disturbances are almost nil. Rona has lately recorded some fifteen cases of gonorrhœa in boys of various ages. He has never observed orchitis in any of his cases, but has had balanoposthitis and severe lymphadenitis or even lymphangitis as complications. In a baby 15 months old, there

was severe epididymitis of both sides, of weeks' duration. Rona has seen a case of real stricture of the urethra in a boy 11 years old. Bokai has seen some cases of true gonorrhœa in boys, but has never seen a stricture. It may be mentioned here that the cases of my first group, though not complete and typical urethritis, do not find their counterpart in the adult, at least not frequently. Within the past six months alone I have seen three cases of true gonorrhœa in boys 3 years, 6½ years, and 9 years old respectively. The histories of the cases are much the same. The boys in the primary stage had much swelling of the body and glans of the penis. There was a profuse, thick green discharge from the urethra, frequent micturition, and very little pain complained of. In one case I was able to watch until no discharge, not even serous discharge was apparent. This boy, I think, was really cured; it is now a month, and he has not returned. The disease ran its course—a very mild one—in about seven weeks. The other boys disappeared from observation. In 1889, I saw a baby, 18 months old, with the same symptoms. Here, also, swelling of the glans was severe, and the baby seemed to suffer very much.

The etiology of the cases in two of the boys is interesting as tending to prove in an almost absolutely conclusive clinical way that the vulvo-vaginitis gonorrhœica of girls is really such and capable of causing urethritis in the male. These two boys at 5 and 9 years, had attempted intercourse with a small girl living in the same tenement. They sent the girl to me and the girl (case III gon.), was suffering from a vulvo-vaginitis which was gonorrhœal. It would be difficult, I think, to find three more convincing cases in the literature of contagion. They go also to prove Epstein's supposition to be correct that peculiar conditions of the sexual concourse favors contagion, for, as stated, his inoculations from gonorrhœal babies to the urethræ of babies were negative.

Examination of the pus of *non-gonorrhœal* cases of anterior urethritis gives pus cells which are the seat of isolated diplococcus forms, but in no way resembling gonococci, proving that in the male urethra in children as in the adult there are also so-called pseudo-gonococci.

Examination of pus of the gonorrhœal cases in boys and babies gives true diplococcus (Neisser) pictures in all their exquisite and absolutely convincing detail of form, arrangement in groups and masses filling up the leucocytes, size, reaction to stain tests. I have also in these cases found the leucocytes

filled with eosinophile granulations. The methods of stain were as detailed with the female children.

Mode of Infection.—The theories of Pott and others who wrote upon the gonorrhœal form of urogenital blenorrhœa (vulvo-vaginitis), in young children presupposed that many of these cases originated in an indirect way from the use of utensils by the children in families whose adults were the sufferers from gonorrhœa, male or female. There are, of course, examples of gonorrhœa being conveyed to children in this indirect way but this does not account for a large proportion of cases. In my own experience I have never treated cases which could be legally construed as those in which children had been dealt with by adults in a forcible manner and thereby contracted gonorrhœa. These cases are all carefully weeded out of my service and referred to the surgeons in charge of the police precinct station. They are of no interest to the author of this paper. But the great mass of my cases are true gonorrhœas and those in which the origin has been kept secret very skilfully by parents, children or both. I believe many of them originate in actual sexual contact either accidental or with intent. This may occur accidentally among the poor where, as in case, XIII there was a history of a man sleeping in the same bed with the child. The mother protested though not even questioned, that the man was not to blame. It was probably some one nearer than a stranger to the child. In another case (IX. gonorrhœal), the mother told me in great distraction that she had slept with the child. Had been ill for weeks with a discharge. Examination of the mother showed salpingo-oöphoritis with also urethritis and endocervicitis. In the urethra of the mother I found gonococci. In another acute case in a child I obtained the same history but though the mother had a discharge (urethritis and vaginitis and endocervicitis), I did not find gonococci. Her discharge was six months old and it may, as Neisser has pointed out in these cases, have required repeated examinations to find the gonococcus. I have spoken of the mode of infection in two of the boys. In the third case of a boy the gonorrhœa was contracted from an older boy with whom he had had relations.

I have also shown, I think, conclusively, that the simple catarrhal vulvo-vaginitis is an entity as real as the gonorrhœal form. How do they originate in face of the fact that in the male simple typical urethritis is so great a rarity (Neisser Bockhardt)? I think in girls everything is favorable to infection. The parts are not protected as the male urethra is. The

mucous membrane is peculiarly favorable to reaction under irritants. The mothers are constantly interfering with these parts in children. In the exanthemata the vagina and vulva react as does any other organ, the nose, ear, glans, etc., to mixed infections. But where no history of exanthemata exists, the tracing of infection is difficult. Among the poor the herding together of parents and children in the same bed may favor contagion from the mothers who suffer from simple vaginitis. I have shown that the simple vulvo-vaginitis in children is contagious also. I have purposely recorded a case in my collection of gonorrhœal ophthalmia in a child of very mild type in which the swelling and chemosis of the conjunctiva was not so extreme. One eye only was affected, gonococci were found in the pus. I had treated the mother before the delivery of this babe for what I thought was gonorrhœal disease of the genitals. This child recovered with simple cloudiness of the cornea. I have simply noted this case in order to point out modes of contagion. Epstein does not believe in indirect contagion and Parrot has also come to the conclusion that contagion from clothes, towels, sheets of the mother is difficult if possible. He has never seen a vulvo-vaginitis result from a gonorrhœal conjunctivitis. I have noted a case in which I think pustular eczema of the labia majora caused simple catarrh of the urethra and vagina and also suppurating inguinal bubo (III. of simple).

In case VII. of the simple forms I have not the slightest doubt that the simple vaginitis of the mother caused the disease. The pus may have been conveyed from the fingers of the mother to the parts of the infant.

The seat of disease. In vulvo-vaginal catarrh, simple and gonorrhœal, most authors, even recent writers (Cahen-Brach) are inclined to place the primary infection in vulvo-vaginal catarrh in the urethra, and look upon the infection of the hymen, vagina and cervix uteri as secondary. However this may be, I have never seen in all my large material a case in which I could say that the urethra alone was affected. When the cases come to me the urethra, hymen and vagina are found all the seat of disease in all forms of intensity in both simple and gonorrhœal cases with the exception of case VII. of simple form. Neisser and Bumm, believe that the vagina in children can be the seat of gonorrhœal disease, whereas in adults, as is well known, they still believe gonorrhœal vaginitis is not an actuality. Werthheim's work, if it is further corroborated, will tend to explode the old theory that the gonococcus can only flourish upon columnar

epithelial surfaces. Werthheim showed that not only the peritoneum could be invaded by the gonococcus solely and purely, but that the planes of connective tissues could be subject to invasion and this in actual inoculation experiments. Thus many infections formerly thought to be due to mixed infections, will come under the heading of true gonorrhœal diseases caused by the gonococcus wholly. The cases of vulvo-vaginitis which I have seen, have, if gonococci were present, yielded this abundantly in the discharge of pus from the *vagina* as well as that of the urethra obtained directly by first cleaning the parts and then squeezing a drop of pus from this tube. In those cases in which the urethral pus was examined, the gonococci cells were not so numerous, though a purer secretion of gonococci exists in the urethra. I have come to believe that the urethra, nymphæ and hymen, the vagina and uterine cervical canal are all the seat of gonorrhœal disease, and one of the chief causes of the intractible nature of the various forms of vulvo-vaginitis is the fact of the involvement of the vagina and cervix, the latter especially difficult to treat in small children. I know that Cahen-Brach intimates that infection of the vagina by urethral pus can be avoided by means of tamponade. Infection of these parts spreads rapidly, and when we see them, at least in my own material, the mischief to the vagina has been done and seems to play a leading rôle.

This is proven in most cases very distinctly by making the vagina the point of attack in treatment. If this is done as will be detailed, the symptoms rapidly subside quicker than by any means known to the author. The irrigation and local treatment of the vagina results in most acute cases in a rapid diminution in the amount and change in character of the discharge. Even those cases in which Cahen-Brach said he prevented infection of the vagina (and no doubt he did prevent marked disease of this tube) it will be noticed he always, at each sitting, irrigated the vagina with sublimate before tamponading the same, preparatory to treatment of the urethra.

In simple urogenital blenorrhœa we may have the vagina affected without the urethra being in the remotest way diseased. This is shown in case VII. of the simple group where I do not doubt the infection was conveyed from a simple vaginitis of the mother to the infant in some way. In this case I took great pains to examine the urethra of the child by scraping the secretion in the long diameter out of the tube, no leucocytes were found and only isolated bacterial forms, while the vagina

was markedly inflamed. The broad expanse of mucous membrane presented by the vagina and hymen as compared to the urethra would naturally prepare one for more disturbance here, and also a more convenient place for infection than the urethra. Thus far my studies convince me that in both forms of urogenital blenorrhœa the vaginal process plays as much a rôle as that of the urethra. I grant, however, that my studies have convinced me that the urethral mucous membrane is a more favorable abiding place for the gonococcus. Even in children (vide case wherein gonococci existed after six months). In the vagina the gonorrhœal process, after a time, in old cases, is replaced by a species of desquamative catarrh in which all traces of gonorrhœal diagnostic elements may be obliterated or scanty in number and difficult to find.

Complications.—The only complication which I have had any experience with and of which I shall treat, are in the female children, ophthalmia, arthritis and bubo. Ophthalmia is a much more frequent complication in children than in the adult. I have observed it in the gonorrhœal cases alone, and in 1890 published such a case in a child three years old, in the *New York Medical Journal*. The blenorrhœa affected both eyes; in this patient there was also the complication of arthritis. It has been asserted that the eye of the child is especially susceptible to contagion, hence the frequency with which we meet blenorrhœa in these children. The cases of blenorrhœa which I have had, showed the same leucocytes filled with gonococci in the pus of the eye as in that of the vaginal discharge. In 1890 I published two cases of arthritis complicating gonorrhœal urogenital blenorrhœa in young girls. In both these cases I have found the gonococcus in the vaginal discharge and published micro-photographs of the same. Hartley in 1887, *New York Medical Journal*, also published some cases similar to these. Deutschman, an ophthalmologist, observed arthritis in children suffering from gonorrhœal ophthalmia; he found what he thought was the gonococcus in the joint effusions. Petrone, Kammerer and Hartley publish cases in which they have found what they accept as the gonococcus in joint effusions. Brieger and Ehrlich, on the other hand, are equally confident in asserting their non-existence and attributing the joint affections complicating gonorrhœa, as due to a so-called mixed infection. However this may be, we see that in these small children the joints are liable to react in much the same way as in the adult gonorrhœal cases. Brieger, Ehr-

lich, Baumgarten, Sanger doubt the presence of the gonococcus in the blood, lymph channels or in joint effusions. Werthheim, however, contends, as already stated, that the gonococcus can invade the lymph channels. Thus the isolated cases of peritonitis, joint affection, endocarditis would be regarded from such a standpoint as really caused by the gonococcus. These points remain still to be more fully studied. The joints which I have seen most frequently affected have been the knee joint, the ankle, the wrist joint. I have not as yet seen cases of involvement of the very small joints. This, perhaps, is a matter of detail. Gerhardt has published cases of gonorrhœal arthritis in older girls above eighteen years of age. I refer to the article on arthritis complicating vulvo-vaginal inflammation in children by me for more detailed literature.

Relapsing cases, and the presence of gonococci in old cases.

—The author has found the gonococcus persist in cases of vulvo-vaginitis in girls, after eight weeks, or nine weeks, or six months (case XVII). In these cases the cells containing the typical pictures of gonococci will be found to be very few. The pus in these cases should be collected from the urethra or deep vaginal fornix. In old cases it should be a routine to examine pus from the urethra or vaginal fornix repeatedly for gonococci, if we are in any way desirous of fixing an exact diagnosis. Neisser has called especial attention to this in the adult and in children it holds good that a discharge may be pronounced simple which is really gonorrhœal, especially in old cases, if fortune and perseverance does not favor in discovering the few leucocytes with typical gonococci.

There is also a distinct class of cases which should always be looked upon with suspicion. These are the relapsing urogenital blenorrhœas. The history obtained in these cases is that the child has suffered for months from a discharge which had ceased being thought cured. In a few weeks or months such a discharge will reappear. Many of these cases are gonorrhœal. Neisser has dilated upon such a class of cases in adults, and in children we have their distinct counterparts. The gonococcus nested in the myriads of rugæ and asperities of the female-urogenital tract will apparently lie dormant to regain energy and cause renewed symptoms at favorable moments. Sparse discharges of recurrent cases should be repeatedly examined, if possible, to find the gonococcus. More especially so, if there is a history of conveyance of the disease from one child to another. Among the cases of old gonorrhœa, I refer the reader to case

XVII. (gonorrhœal), especially where for the past six months previous to visit, the child had a discharge, which at first profuse, was finally very spare. At first examination it seemed it might be simple catarrh, but subsequent careful search in the minutest quantity of urethral pus revealed diplococci (Neisser.)

Treatment.—In order not to repeat the literature upon treatment, I will simply say that all the new methods recommended for the treatment of this affection, thalin, iodoform bougies, injections, silver applications, have been used by me with the same degree of success as that obtained by others. They have failed to effect what we may call a shortening of the disease. The discharge ceases, under the above treatment, to be profuse, but the patients complain that small amounts of secretion are found on the vulva every morning. The disease drags on a course of six, eight, or even twelve weeks. Being convinced that this prolonged discharge from the parts is in part aided by the anatomical nature of the vagina and cervix uteri, I have adopted the following course in all cases.

The parts being cleansed with 1-5000 sublimate, externally, a Tuttle's urethral speculum is introduced into the vagina, and the same is thoroughly douched with sublimate, 1-5000. The parts are then dried with a uterine applicator and cotton, and a 10 per cent. solution of nitrate of silver is carried upon a cotton applicator into the vagina up to the cervix, and the parts thoroughly painted with the same. The vagina is again douched with 1-5000 sublimate, and the speculum withdrawn. In acute cases the applications cause some bleeding, due to erosions in the vagina; this soon ceases after a few applications, and further treatment is not attended with any stains of blood on the applicators. The silver is at first applied daily, and then every other day. Under this treatment the discharge ceases to be profuse within a few days, but I am not in a position to give exact data. I can recommend it as being the most satisfactory mode of treatment, and the most rational method to employ. The children struggle with every mode of treatment, but with good table and appliances, less harm is done by the above modes than by simply trying to introduce bougies, which give pain and cause no end of trouble. I have refrained, in all my cases, from treating the urethra of girls. The parts are so small that the pain resulting from interference with the urethra by our present methods does not justify persistence in efforts of treatment. The eye and joint complications I generally have referred to the surgeon for treatment. The bubo presents nothing peculiar.

ILLUSTRATIVE CASES.

I. *Simple non-gonorrhœal urogenital blenorrhœal vulvovaginitis*.—L. G., aged 6 years, suffering for the past four weeks from a vaginal and urethral discharge. The discharge from the urethra shows only isolated diplococci not characteristic of gonorrhœa.

II. *Simple relapsing form*.—S. H., aged 6 years, has three months ago had a discharge from the vagina. It had apparently ceased and now has returned. The vagina shows a gleet yellow discharge, slight redness of the nymphæ, no gonococci in urethral or vaginal secretion.

III. *Simple form with bubo*.—Ida L., aged 5 years, has had a discharge from the vulva now of twenty-four hours' duration. On the vulva there are pustules and in the introitus aphthous ulcerations. The vagina and urethra show a purulent discharge and there is an impetigo upon the vulva (labia majora.) The vaginal discharge is green and thin. The right inguinal lymph nodes suppurating.

Examination of urethral and vaginal discharge shows no gonococci. Two cases of non-gonorrhœal discharge repeatedly examined and nothing found but pseudo-gonococci which were also isolated and cultivated.

IV. R. M., aged 7 years, has for past two weeks suffered from a yellow discharge, no urinary symptoms, no redness of parts. This child has had a discharge a year ago.

Pus from vagina and urethra shows pure examples of pseudo-gonococci. (Lustgarten.)

V. Annie M., sister to above, suffers from a urogenital blenorrhœa, two weeks duration. The discharge is not great but whitish, purulent, no urinary symptoms, no redness of parts.

Repeated examination of urethral and vaginal pus shows the above pseudo-gonococci.

VI. Healthy child $3\frac{1}{2}$ years old has been sick a week with painful and frequent micturition. Mother has noticed that mornings the child has discharge from the vulva adherent in crusts, not abundant. Parts are swollen but not markedly so. Discharge is greenish yellow fluid and just moistens the parts. The urethral orifice bathed with drop of pus. Nymphæ swollen and tender. Child has slept with mother who has a babe eight weeks old. Urethral and vaginal pus carefully and separately examined; no characteristic gonococci. The bacilli, and pseudo-diplococci (as in V. and VI. cases), did not decolorize with Gram.

VII. *Simple non-gonorrhœal vaginitis without any signs of urethritis*.—S. G., infant aged 12 months well nourished. Has for the past week shown a discharge from the genitals. There are no other symptoms. Examination shows that the vulva is of

normal hue, not eroded, no crusts or discharge visible, urethra also perfectly normal but the hymen is somewhat swollen but not reddened in hue. The orifice is bathed in pus; squeezing the perineum causes the appearance at the hymenal orifice of a thick viscid creamy yellow discharge. Child sleeps with its mother. The mother is six months pregnant but examination shows nothing abnormal. The leucorrhœa of mother is normal in quantity and what we would expect in a woman at this period.

The pus of vagina of child was examined but absolutely nothing found but pure pus, in a few of the leucocytes isolated single pseudo-diplococci, these even were rare. The infant's urethra was scraped but absolutely no pus cells were obtained showing it was not inflamed.

The mother's urethra examined, no leucocytes indicating inflammation present, only epithelium, pseudo-diplococci and other bacteria.

I. *Gonorrhœal vulvo-vaginitis or urogenital blenorhœa*.—L. R. aged 4 years. Mother has noticed discharge for the past two days from vulva. Patient complains of pain on passing urine and when walking. She has yellow crusts of dried pus on labia majora, a thick greenish yellow discharge from the vagina. The nymphæ are much swollen as also hymenal structure. Hymen imperforate, meatus urinarius red and swollen.

Pus contains gonococci.

II. S. F. aged 4 years. The discharge from vagina thick and greenish hue, has yellowish crusts on labia majora, has been ill six days. Has been in a leading hospital for tubercular disease of jaw and returned home with the discharge.

Pus shows gonococci.

III. C. S., girl who has communicated gonorrhœa to two boys. Examined in the seventh week of the disease. There is a urethral and vaginal discharge and the vulva is reddened and eroded. The discharge is spare and gleetty; when examined very characteristic gonococci found.

IV. S. D., aged 2 years. For past three days there has been a thick yellowish green discharge from vulva. Discharge is abundant about the urethra and dries upon the labia majora in crusts.

Pus contains abundant gonococci.

V. C. M., aged 10 years. Pale and anæmic child has had a thick greenish yellow discharge from genitals for the past eight days, no other history, denies symptoms of any kind.

Pus examined, gonococci.

VI. Jenny S., aged $3\frac{1}{2}$ years, has for the past six days suffered from a discharge from the genitals, which is thick, greenish and dries in crusts upon the labia majora. Parts are swollen and painful at the introitus, no inguinal adenitis.

Pus examined gives gonococci.

VII. D. R., 6 years old. Has for the past three days complained of painful and frequent micturition. She has had a thick yellow discharge from genitals which dries in crusts on the labia majora. There is great swelling of the nymphæ.

Gonococci in pus.

VIII. *Gonorrhœal vulvo-vaginitis with pains in the joints.*—M. W., sick with vaginal discharge for past two weeks. A week ago complained of pains in the ankles and the right wrist. The discharge is a profuse greenish one and the nymphæ and hymen are sensitive, swollen. Crusts on the vulva, no temperature, no bubo.

Discharge shows gonococci.

IX. F. B., aged 4 years. Four weeks before visit had measles. A week before consultation mother noticed a greenish yellow discharge on clothes. This has continued since. There have been no urinary symptoms. Child is intelligent and robust. There is erosion of vulva; introitus and urethra painful and swollen, the discharge is thin and fluid. That from the vagina contains abundant gonococci. The mother of this child has, for the past three days, complained of painful and frequent micturition but secretion from urethra of mother shows nothing definite. Mother sleeps with child.

X. M. R., aged 6 years, has been in a leading metropolitan hospital. Six days before visit was discharged from the hospital when mother noticed the vaginal discharge. The discharge from the vagina dries in crusts on the labia majora, no symptoms referable to bladder. The labia majora are eroded, the vaginal and urethral discharge is thick and yellow, parts about the introitus inflamed and much swollen and painful.

Pus from vagina contains gonococci which persisted after eight weeks, when patient returned to begin treatment anew. Then discharge very small in amount but a few gonococci present.

XI. C. H., 8 years old, has had a discharge for two weeks from the genitals. Has never had such an illness before. There are no urinary symptoms. The pus is white, creamy, and does not excoriate the labia. The child has slept with her mother who, for some time past has suffered from a profuse vaginal discharge, frequent and painful micturition. Mother's discharge is thick, ropy and yellow. Mother volunteered statement that child may have contracted the disease from her.

Examination. Pus of vagina of child shows abundant gonococci. The pus taken from urethra of mother contains a few leucocytes giving typical gonococcus pictures.

XII. A. L., aged 4 years, has for a week been ill with a yellow discharge from the vagina and urethra. There is no history of urinary symptoms. The introitus vagina painful, red and somewhat swollen. Pus from the vagina showed gonococci.

XIII. A. G., aged 4 years. Two weeks ago the child had developed a discharge from the vagina, frequent, but no history of painful micturition. There has been some malaise, no buboes. Urethral opening, nymphæ and hymen all red, painful, swollen; pus taken from the vaginal opening contains abundant gonococci. The mother volunteered statement that child had slept in same bed with a man who she asserted was sick (?).

XIV. C. M., well nourished child aged 8 years, has for the past two weeks suffered from a purulent discharge from the genitals. There is frequent micturition but no marked pain; no other history.

Examination shows erosions around introitus; same is painful and swollen. The pus discharged from the urethra and vagina is thick and greenish in hue; no enlarged inguinal glands.

Pus contains abundant gonococci.

XV. S. B. No previous history. Child is 5 years old and well nourished. The vaginal discharge is of one day's standing; no other symptoms; no buboes; no pain on urination. The child sleeps with mother who for five months has suffered from a vaginal leucorrhœa.

Examination. Pus from child, gonococci.

Examination. Pus from mother, no gonococci. (Cervix and urethra examined.)

XVI. A. W., 5 years old. Has suffered for five days from a discharge from the genitals. No history of painful micturition or frequent desire to pass urine. Child is very robust and well built for its age. Has a very profuse discharge from the urethra and vagina, which show abundant gonococci.

XVII. Old gleet form in which urethra showed gonococci six months after onset of disease.

M. R., 6 years of age, has for the past six months had a vaginal discharge which at times was profuse at others scanty. There has been burning pain upon passing urine. Introitus is red and spongy with a very scanty vaginal discharge of a thin consistence and greenish in hue. Urethral orifice swollen and reddened.

Pus taken from urethral canal shows gonococci.

I. *Simple erosions and catarrh of the anterior urethra in boys.*—Boy 9 years old suffers from an erosion or impetiginous condition of the meatus urinarius. By squeezing the glans a small drop of pus can be expressed from the urethra. This pus contains cells the seat of isolated diplococci, but they do not have the arrangement of gonococci. No other history as to origin of affection.

II. Boy aged 5 years. For the past week has had an ulcerated and sore condition of the meatus urinarius. When the glans penis is pressed a small drop of pus exsudes from the urethra.

Cover glasses show no gonococci.

I. *Gonorrhœal urethritis in boys*.—S. B. Intelligent boy aged 5 years, not abnormal in physique. Has for several days had a urethral discharge. Thick yellow. The glans, penis and body of penis much swollen. Makes statement that he has played with child in same house (history related elsewhere). This child was small girl 7 years old suffering from gonorrhœal urogenital blenorrhœa.

Pus from boy's urethra showed gonococci.

Case sent to me by Dr. W. W. Van Arsdale.

II. Boy aged 9 years came to me with a gleety, milky discharge from the urethra. Penis somewhat swollen, the boy has no other symptoms and denies that there is painful or frequent micturition. States he contracted the disease from same girl as case I.

III. P. B. Boy aged 6½ years, intelligent, robust, brought to me with a creamy white discharge from the urethra. There is much œdema of the glans, and penis and this condition said to have been worse. Is sick now fourteen days. States that another boy gave him the trouble (?). The boy cured apparently after 7 weeks of treatment. Urethral pus shows gonococci.

IV. A specimen in my collection, dated August 1889, taken from the urethra of a babe 18 months old, who, for two weeks, had an abundant discharge from urethra, the glans, penis and body of penis is much swollen, child is very restless and evinces signs of pain when organ is examined. No history. Pus of urethra contains gonococci.

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ON THE OCCURRENCE OF TERTIARY LESIONS OF SYPHILIS AS
THE RESULT OF DIRECT LOCAL INFECTION, WITH GENERAL
REMARKS ON SYPHILIS AS AN INFECTIOUS DISEASE.¹

BY

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IT is a well-known fact, that in numerous instances, where so-called tertiary manifestations of syphilis are observed, neither the history nor the most minute and painstaking examination of the patient is able to reveal or even to intimate any trace or sign of primary and secondary symptoms ever having preceded. The lesions themselves in such cases do not differ at all from those observed in patients who went through the regulation course of primary and secondary stages, neither in their outward features nor in their location, in fact all organs which usually become the seat of tertiary symptoms, may be found affected. Feibes of Heidelberg, who has published a number of cases of "Syphilis occulta," as he calls them, from the clinic of Prof. Erb (*D. Archiv. klin. Medic.* XLVIII) enumerates a great variety of tertiary symptoms, sometimes restricted to a single organ, sometimes affecting different and distant localities, and combined with general cachexia and marasmus. It seems, however, that certain forms of the disease are found with particular frequency or almost regularity, prominently among them the serpiginous syphilide, a manifestation so characteristic that Ricord has called it "*la signature de la syphilis*." It is remarkable that this serpiginous syphilide is very often the only form in which the disease appears in an individual, that it is generally confined to only one or to but very few localities on the same patient, that its

¹ Read before the Section for Genito-Urinary Surgery, New York Academy of Medicine.

peripheral progress is extremely slow, extending over a number of years, ten, fifteen years and longer, without, as a rule, materially affecting the general health; in fact they are often found on men or women of splendid physical development and vigorous strength, who bear all kinds of hard work and hard life without the slightest detriment to health, and often are so little affected by their skin affection, that they are not very anxious to have them cured. O. Lassar, of Berlin in a paper: *Zur Anamnese der Spät Syphilide* (*Berl. klin. Wochenschrift*, 1892, No. 29) states, that among nearly 200 cases of late syphilides observed by him within the last two years, in more than sixty, that is, about 30 per cent. the history absolutely failed to reveal the presence of previous infection with syphilis. If I could go over all similar cases which I have observed myself, I have no doubt that my cipher would not differ much from Lassar's, the frequent absence of any history of early syphilis in cases of serpiginous syphilides, destructive affections of the nose and face, etc., having early attracted my attention. We are universally and absolutely taught that all persons affected with tertiary lesions of syphilis, at some earlier period of their life, must have been infected with either hereditary or acquired syphilis and must have passed through a primary and secondary stage, the symptoms of which were overlooked owing to their small intensity or to insufficient observation. This is a doctrine of faith rather than one supported by indisputable acts or by scientific proofs of any kind. We are used in practice to see every case of infection followed by a more or less distinct primary lesion and by a certain amount of secondary symptoms; there seem to exist exceptions from this rule in both stages, but they are so rare that they cannot invalidate its stability. Still we are expected to believe that in 30 per cent. of Lassar's cases of serpiginous syphilides, the entire primary and secondary stage were overlooked, or that the patients were all persistent liars. Or must we accept the explanation given by Lassar himself, which I do not believe will find general approval? He says in his paper: "Syphilis can creep into the system without establishing itself in the usual manner at the point of entrance. An individual primary lesion under any circumstances means syphilis, but syphilis does not always require a tangible initial focus, to be received into the lymphatic system. Every single irregular sexual intercourse, even in the absence of a marked primary symptom, may become the occasion of infection." This is but the natural outgrowth of the

arbitrary doctrine which rules our teaching. If you follow up this opinion a little farther in its consequences, you will hardly be able to find a single person who might claim to be free of syphilitic infection. E. Finger of Vienna, in a paper to which I shall repeatedly refer later on, entitled: Syphilis as an infectious disease from the standpoint of modern bacteriology, (*Archiv. of Dermatol.* 1890, XXII, p. 331 seq.) asserts that tertiary manifestations may appear in individuals who never before had exhibited the signs of virulent infection, primary and secondary symptoms, but who had acquired immunity, namely first in mothers, who have born children hereditarily syphilitic from the father without having become infected themselves, and second in the children of syphilitic parents. In support of this opinion he cites numerous authors, principally Behrend and Hutchinson, who first published such observations, Diday Baerensprung and others, and then goes on to say: "Whenever objection was made against these observations, the general drift was always, that tertiary syphilis, without the preceding of primary and secondary symptoms, was simply impossible; that the primary and secondary symptoms necessarily were overlooked by the authors in consequence of insufficient or interrupted observation. Such a criticism," he continues, "with due reference to strict critique as the duty of scientific study, goes too far and is not scientific any longer, if it simply throws overboard whatever does not fit within the mold of their once accepted system." Although I do not deny, that in a large number of instances, particularly in females, the primary lesion and even the secondary symptoms following the proper period of incubation, may be overlooked, it is improbable that this should happen in so large a number of cases, and often under circumstances, which seem to render infection by sexual intercourse almost an impossibility. Extragenital infection, although often enough not recognized, at least not at the proper time, in most instances will leave the recollection of the presence of some lesion or a scar, which would direct the investigation to the real source of the infection. Not so rarely, however, the history given by the patients who, as a rule, are not conscious or suspicious that they bear any symptom of syphilis and therefore need not be suspected of hunting up an excuse for any indiscretion, points most directly to the origin of their tertiary lesions from some trauma, or from the direct or indirect contact with some object or person, which had aroused their suspicion. It is true, exactly the same thing will occur with patients who

give a clear history of primary and secondary symptoms; the influence of injury and trauma of every kind on the provocation of tertiary lesions undoubtedly exists, vaccination among others often playing an active part. Haslund (The origin of tertiary syphilis, *Brit. Journal of Dermatology*, July, 1892, *Monatsh. f. prakt. Dermatol.* XVI, 3 Febr., 93), reports the case of a boy, twelve years old, the son of a notoriously syphilitic father, who alone on the strength of a slight impression of the nose and deep horizontal furrows of two upper and the four lower incisors, and the two lower canines (by no means typical specimens of Hutchinson's teeth) is suspected of hereditary syphilis. It is, however, reported, that he did not exhibit any syphilitic manifestations until he was six or seven years old, when he was vaccinated, and later on a skin affection developed, starting from the vaccination pustules and steadily progressing. Several years afterwards similar lesions appeared on the right elbow and on the right leg. In this case we have at least a shadow of the probability of hereditary syphilis, but not the slightest proof can be found in another case, which Haslund has placed at the head of his paper. A cicatrizing serpiginous syphilide extending on the upper and outer parts of the left arm over the left shoulder, had immediately started from vaccination. The bearer was a man of sixty years, sound in every respect, vigorous and well nourished. He stated that he had never had any illness and was not aware of having ever suffered from syphilis. He admits that he had some venereal affections in his early youth as well as sores on the genitals, but they were most insignificant, and he had never undergone any anti-syphilitic treatment. The present affection of the skin commenced in 1875, when he was re-vaccinated with a positive result. The pustules pursued their normal course, but close to them protuberances sprang up, ulcerated and formed similar sores, which steadily increased for years, the old sores healing, while new protuberances appeared around them. He never applied for medical advice as he suffered no pain nor was he ever prevented from doing his work.

If you look upon a case like this without any prejudice and are to draw a simple logical conclusion, the nearest one would certainly be, that with the act or at the time of the vaccination the patient was inoculated with some virus which produced a local affection of the skin, which since, for thirteen or fourteen years has remained local and progressed locally only without ever affecting the patient's general health. Haslund, of course,

draws the usual conclusion, simply because our present knowledge seems to admit of no other explanation. Similar cases are by no means so very rare among the numerous ones of late syphilitic manifestations without a history of previous syphilis, although it is not often possible to fix the precise date or the precise act so definitely as in the vaccination cases, but it is obvious that numerous opportunities are offering themselves in daily life. In my own experience I have met not a few cases, in which the history made a local inoculation and the immediate development of tertiary symptoms on and around a point of infection much more probable than the acquisition of syphilis in earlier life with unobserved primary and secondary symptoms. Most of these cases having occurred in dispensary practice, I am not in possession of notes sufficiently exact to present them here. I shall briefly mention, however, two, occurring in private practice within the last few years. One patient was an elderly farmer, from New Jersey, who has always enjoyed good health, has brought up a family of healthy children and who certainly had no hereditary syphilis, his parents having been known to me for years, always enjoying excellent health and having died at a very ripe age without ever having exhibited signs of constitutional disease. This farmer consulted me for an affection of the scalp, which I easily recognized as a gummatous syphilide. For certain reasons I did not tell him what his disease was, and avoided any unnecessary questioning, but simply prescribed for him. Before he left my office, he mentioned that several years ago he had a farmhand, on whose head he had noticed sores. He had occasionally used this man's head-covers and soon after had noticed the eruption on his own scalp. This remark, coming from the patient under circumstances which did not call for any excuse or explanation, was sufficiently interesting to force upon my mind the idea of the possibility of a local infection. In the second case which came under my observation last summer, the affection was likewise one of gummata of the scalp. The intelligence, education and position in life of the patient rendered the overlooking of primary and secondary symptoms of syphilis on himself or the willful concealment of the same extremely improbable. The affection had been present for some time and had been treated locally by several physicians without any decided result. The patient came to me with the remark that syphilis was out of the question. The character of the lesions was by no means as obvious as in the other case, they looked at first like the

remnants of sluggish subcutaneous abscesses, and the circumstance that they apparently healed at first under the application of injections of mild solutions of corrosive sublimate into the surrounding tissue seemed to confirm the simple septic nature of the process without more than suggesting syphilis. But some recurrent lesions distinctly assumed the characteristic appearance of small cutaneous and subcutaneous gummata. They finally healed within a very short time after five intra-muscular injections of the salicylate of mercury, containing altogether not more than three and a half grains of this salt, without any local treatment. It is impossible to trace the infection to any certain occasion—the patient is not infrequently brought into contact with syphilitic people—opportunities for the infection of the scalp by his own fingers in scratching his head, etc., were amply present.

That these cases in themselves do not prove anything, I am well aware, but you will admit, I believe, that they furnish some reason to justify the consideration of the question, whether such a local inoculation in itself is really absolutely impossible or improbable, particularly, if you remember, that within the last fifteen or twenty years much light has unexpectedly been thrown, by recent discoveries in bacteriology, etc., upon the nature of certain diseases; how many facts formerly considered impossible, have been proved to exist; how many theories and opinions formerly accepted without any doubt and apparently impregnable, have been overthrown and fallen to pieces, while others, apparently chimerical when first advanced, have taken their place. Indeed, if we look upon tuberculosis, particularly upon the tuberculous affections of the skin, as they now stand before our eyes, we may well take courage to question the absolute validity of the now prevailing opinion regarding tertiary syphilitic manifestations without a connecting history.

The tertiary lesions clinically bear the closest resemblance to the local manifestations of tuberculosis, so much so that in many instances the differentiation between them becomes extremely difficult and may require the test of specific treatment to decide their nature. Lupus, tuberculosis verrucosa cutis, tuberculosis ulcerosa proper and scrofuloderma, the principal forms of tuberculosis of the skin, have their counterparts in the tertiary syphilide, in the ulcerating serpiginous syphilide often called lupus syphiliticus, in some of the more resistant forms of tubercular syphilide, in the deep gummatous ulcer, in the gumma itself. The same similarity occurs in the affections of the

mucous membranes, particularly of the throat, mouth, tongue and larynx, in the affections of the bones and joints, and in the visceral lesions of syphilis. If then it has been proven, apparently beyond doubt, that in all these lesions of tuberculosis the bacillus is not only present, but has to be considered the etiological factor in their production, it will not seem absurd any longer to suppose that the corresponding lesions of syphilis are produced by a micro-organism similar in nature and similar in its action to that of tuberculosis, it will rather appear to be justified to look for the existence of such a parasite, *one*, however, *not identical* with *that of active or virulent syphilis itself*.

Over and over again, syphilis is compared and classed with tuberculosis, but in reality it is only tertiary syphilis which bears a close resemblance, while syphilis in its early stages is much more nearly related to the so called acute exanthemata, a point to which I shall return later on. Tertiary syphilitic lesions are almost unanimously considered to be non-contagious, in the sense, however, that they do not produce infection with the virus of syphilis proper and do not cause primary and secondary symptoms. But this opinion is not implicitly received by all authors.

Taylor (Bumstead & Taylor, 5th ed., p. 459), says: "The inoculability of tertiary symptoms has never been tested upon persons free from syphilitic taint, and its possibility therefore, may yet be demonstrated, as that of secondary symptoms has been. Their transmission by hereditary descent in a few instances, still preserving their peculiar type, is a known fact." Finger, v. i., p. 358, places it as an undisputed fact that tertiary products are not contagious, partly on the strength of clinical experience of men like Baerensprung, Diday and others, and partly on that of experiments with inoculation on healthy persons. He cites Ricord, Diday, Larrhos, Baerensprung, Tantucci, Profeta and Boeck as having made inoculations on healthy persons with negative results. Some of these experiments seem to be of doubtful value, but even accepting them without reserve, still as M. Zeissl like Taylor maintains, as well as it has taken some time before the contagiousness of secondary lesions was universally acknowledged, it may be proven at any time that material from tertiary manifestations can be inoculated. A. Neisser, in *Ziemssen's Hautkrankheiten* I., p. 681, still considers it possible that gummatous substances may be infectious and cites experiments made by Haensell (*Graefe's*

Archiv. f. Ophthalmologie, XXVII., 2 p. 43), on the eyes of rabbits. Haensell claims that four months after the inoculation with gummatous substances, he observed several rather large, yellowish, vascularized nodes, which were gummatous tumors starting from the corpus ciliare, as anatomical examination afterwards showed. The incubation was longer than usual in tuberculosis, the character of the nodes more chronic and blood vessels were present, which are entirely absent in tuberculosis. These experiments are so exceptional, however, that I do not wish to place too much value upon them. I shall rather point to the difficulties which present themselves to the solution of important questions in relation to local tuberculosis, about which we have so much more positive knowledge. For instance, we know but very little in which way the infection takes place which produces lupus; almost the only thing we know is, that ample opportunity for such inoculation was present in most of the cases. It is impossible to fix the precise date of the event. We have yet no positive knowledge of the period of incubation nor sufficient data as to the appearances of the earliest local manifestations after inoculation, and we cannot even now answer with certainty whether lupus is due to direct inoculation, or to infection from contiguous tuberculous organs, as joints, lymphatic glands, etc., or whether it is due to hematogene tuberculous infection in all or in the majority of cases. Almost everything that has just been said in regard to tuberculosis might hold good for the manifestations of tertiary syphilis, which clinically and anatomically show such great resemblance to the tuberculous affections. I want to call particular attention to the different modes of the origin of tuberculous lesions; syphilitic lesions would be produced in exactly the same way. In analogy with the tuberculous manifestations, the presence of a bacillus or other micro-organism in syphilis similar to that of tuberculosis, would easily explain the origin and the clinical character of the tertiary syphilitic manifestations, not only in cases where a primary and secondary stage have been observed in the regular order of things, but also in those cases in which the connecting history is missing. Such a bacillus, it is true, has with certainty not yet been found, although I cannot omit to call attention to the investigations of Birch-Hirschfeld (*Bakterien in syphilit. Neubildungen*, *Centrabbl. f. d. Medic. Wissensch*, 1883, 33, 44) which have been cited by Neisser as of great importance, referring mostly to tertiary lesions. But you certainly cannot deny the possi-

bility that it will be found in the future, not more than you can deny that the bacillus of tuberculosis has actually been found in lupus and other tuberculous affections.

(To be continued.)

A NEW SPONGE-ELECTRODE.

BY

FRED. J. LEVISEUR, M. D.

ALL electrolytic operations of the face require great accuracy. Sudden shocks, which are produced by the unexpected closing or opening of the electrical current, give rise to involuntary, convulsive movements, which are very disa-



greeable for the patient as well as for the physician. In order to eliminate this disadvantage as much as possible, I constructed a sponge-electrode which enables the patient *to close and open the current by simply closing and opening the hand.*

The electrode consists of a hard rubber tube, lined with metal, four inches long and one inch in diameter. The upper part of the tube is cut out so as to give it the appearance of an Indian canoe. One end is closed and carries the arrangement for the connection with the wire of the battery. There also projects a piece of hard rubber which serves as rest for the thumb, when the electrode is in use. The other end is provided

with a soft rubber bulb. An oblong piece of sponge is put into the cavity of the electrode. The sponge is thoroughly moistened and any surplus of water drained off by compressing and releasing the rubber bulb. The electrode connected with the wire of the battery is then placed in the patient's hand, either the right or the left. The thumb rests on the hard rubber projection, the palm supports the closed part of the tube and the sponge is opposite the flexor surface of the fingers. If the hand is now closed the fingers come in contact with the sponge and the current is closed. The accompanying wood-cut was kindly furnished by J. C. Vetter & Co. (Meyrowitz Building, 23d Street) who make the electrode.

I have used this electrode for over two years in a great number of electrolytic operations of the face with great satisfaction. Five cases of successful removal of xanthomata from the eyelids were especially adapted to demonstrate the value of this new instrument, which I take the liberty to recommend heartily to the profession.

Hoffman Arms, 640 Madison Ave.

Society Transactions

THE NEW YORK DERMATOLOGICAL SOCIETY.

223RD REGULAR MEETING.

DR. G. T. ELLIOT, *President, in the Chair.*

Case of Colloid Miliun of the Face.—Presented by DR. FOX.

DR. FORDYCE said that the eruption showed great resemblance to a papular syphilide.

DR. BULKLEY stated that he never before saw a similar case.

DR. ELLIOT remarked that in this case the disease was the same as in the one presented by Dr. Fox at a former meeting. He would throw out the diagnosis of colloid miliun and would consider it to be a disseminated lupus, as was found in the former patient.

DR. FOX considered more the name and the clinical aspect. The case was clinically of the same nature as similar eruptions described as colloid miliun by other authors. The location and the spontaneous disappearance spoke against the diagnosis of lupus. The eruption had existed nine months; on scraping of the lesions the bleeding was much more profuse than in acne, and a hole or depression remained after scraping. Several lesions on the ear showed the peculiarities of the lesions. No signs of syphilis had been found on the patient.

Case for Diagnosis.—Presented by DR. A. R. ROBINSON.

Julia B., 10 years of age, has always been healthy, as well as three other children of the family. The present disease commenced about three and a half years ago, suddenly, as far as is known, and without any subjective symptoms, and has not changed in character or extent since that time. It has never itched nor ever been accompanied with a purulent or other exudation.

The lesion is about seven inches in length and about one-half inch in breadth, except at the lower end, where it reaches two-thirds of an inch in diameter, crossing the popliteal space of the left leg from above, downward and inward, in a very slightly curved line. The part above the popliteal space is somewhat longer than the one below it. The lesion or lesions, at first glance, look like a healing process after a traumatism, as a deep scratch as regards color and form, or a false keloid. But closer examination shows that it is composed of isolated or confluent lesions, from a small pin-head to pea size, sharply limited, very slightly elevated, reddish in color, the color greatly disappearing on pressure. The largest lesions are covered with a few bright scales. Where lesions are confluent, the part is more elevated, but color and scaling the same. There are no vesicles, or pustules, or warty appearance. The lesions look like those of lichen planus, but they are rather bright red in color, have a slightly sloping margin and a somewhat obtuse or rather acuminate form. Many of the lesions have the shining surface and general character of lichen planus, but lack the violaceous color and deepened center to be expected in some lesions, if many are present. The absence of vesicles, or serous exudation, or special scaling, excludes the diagnosis of eczema. The case differs from keloid by the presence of a number of isolated lesions, the shining surface and the history, and from a *nævus unius lateris* in the absence of any papillomatous spots.

DR. MORROW thought that the character of the individual lesions was that of lichen planus, but that the figuration was not at all characteristic; also, the coloration was not at all typical. Lichen planus commonly presents a much more diffuse pigmentation. From the appearance of the lesions, he would be disposed to consider the diagnosis of lichen planus as possibly correct.

DR. FORDYCE could clinically think only of lichen planus; it had the appearance as if the papules had followed the line of scratch marks in their development.

DR. BULKLEY said that the case recalled to him the lesions of lichen moniliformis.

DR. FOX said, in regard to lichen moniliformis, that Neumann's and his own case were not lichen planus, but lichen ruber, or pityriasis rubra pilaris. The figuration was not unusual for lichen planus, in which the following of regular lines was rather the rule. The color in the present case seemed to be indeed somewhat deeper than usually.

DR. SHERWELL thought that the color was lighter than it would be in lichen planus of such long standing. Its fixed limitation was also against the diagnosis of lichen planus; hence he could not agree with that diagnosis, but would be inclined to class it as a *nævus unius lateris*.

DR. KLOTZ agreed with Dr. Sherwell. He did not see any characteristic features of lichen planus in the case, but considered it a case of *nævus unius lateris*. He had presented once before the Society a case of such a *nævus*,

and at that time it had been affirmed by several members that *nævi* undoubtedly could grow and extend long after birth; there was, therefore, no reason why they should not develop anew after birth. The long duration of the lesions in the present case, without any tendency to extend and without the development of any other lesions on any other locality, as well as the color, were decidedly against the diagnosis of lichen planus.

DR. ELLIOT agreed with Dr. Klotz, that the case was not one of lichen planus, with which he did not see any resemblance. In his opinion, it was a *nævus unius lateris*. The possibility of its being a sweat gland disturbance should also be borne in mind, as in a case in Dr. Doutrelepont's clinic of typical *nævus unius lateris* the microscope showed that it was a cystadenoma of the sweat glands. In another case, treated by the speaker himself, he found under the microscope a cystadenoma of the same glands.

DR. KLOTZ stated that he considered *nævus unius lateris* as a clinical diagnosis, which did not signify any particular anatomical condition.

DR. ROBINSON remarked that on examination small pin-head lesions are visible, with slight scaling on some places and a smooth shining surface on others. The papules here and there showed the tendency to run together into patches. The long duration, the bright color and the absence of itching were unusual for lichen planus. Furthermore, the patch has not increased in size, and there are no lesions on any other part of the body. In *nævus* there usually was some papillary formation present, which in this case was missing. He still thought it was a case of lichen planus.

Case of Erythema Multiforme Universale.—Presented by DR. FORDYCE.

The case was presented because of the wide distribution of the eruption. Gyrate and circinate patches were present, as well as urticarial lesions. The eruption was a recurring one, and was attended by marked itching.

DR. CUTLER called attention to the prevalence of the urticaria lesions.

Two Cases of Tuberculosis Verrucosa Cutis of the Hand.—Presented by DR. BULKLEY.

1. Chas. B., a laborer, native of United States, 23 years old.

The lesions on the dorsum of the left hand have been present about seven years.

Patient's mother had died of phthisis at the age of 60 years. Patient nursed her during her illness.

The disease began as a "lump" upon the web between the second and third fingers. From this situation the trouble spread steadily to the back of the hand. When the patient came under observation, last May, there was a patch of disease four square inches in extent upon the dorsum of the hand. The diseased area was characterized by general infiltration, tubercles and nodules, all of soft consistency and marked here and there by pustules and small ulcers. There was no cicatricial tissue.

The treatment has been the repeated use of the curette under cocaine and the occasional application of the Paquelin cautery. The wound was invariably dressed with dermatol. The last curetting was done about the middle of January, 1893.

2. B. M., 11 years of age. Eruption appeared between four and five years ago, in shape of small red spot on first knuckle of right hand; was not raised nor painful, nor caused any other subjective symptoms. It never

disappeared again, but grew slowly larger, and at times became covered with thin red scales; it was never picked nor injured otherwise. The patient did not present any other eruption elsewhere. Father died of typhoid. From five children, the oldest died at the age of 3; would be 17 years old now. The four remaining children are perfectly well; mother living and healthy.

Now there is present an infiltrated area over the first right knuckle, of red color, not sharply defined, shading gradually into healthy skin; the lesion is not painful; slightly raised with slight solution of continuity in several places of the surface.

DR. FOX said in regard to the treatment of such cases that Unna's ointment of 20 per cent. salicylic acid and creosote acted admirably after a brief treatment with the curette.

DR. KLOTZ said that he doubted the tuberculous nature of many such cases, they more resembled lupus erythematosus or belonged to a class recognized by Leloir, which presented some features of lupus and some of lupus erythematosus. He had at present under observation a boy with a similar eruption of the hand, which some time ago had been presented before another Society as tuberculosis verrucosa cutis. He hoped to bring the case before the Society at a future meeting. The lesions healed under the permanent application of a 10 per cent. salicylic acid plaster without leaving the slightest scar. This he would not consider possible in a case of tuberculous lupus. He thought that the scars in such cases were entirely the result of the treatment.

DR. BULKLEY stated that he insisted only on the clinical resemblance of these cases to tuberculosis verrucosa; he believed that they could be cured without any deeper destruction of tissue.

Case of Disease of the Scalp in an Elderly Woman, Lupus Erythematosus or Syphilis.—Presented by DR. MORROW.

DRS. JACKSON and SHERWELL both made the diagnosis of lupus erythematosus, on account of the localization and the appearance of the lesions.

DR. ROBINSON agreed with the diagnosis of lupus erythematosus. The cure of lupus erythematosus of the head was extremely difficult to obtain; he had observed a number of cases but none of them got well except one, which was cured by erysipelas. Alopecia was a frequent consequence of the disease on the scalp.

DR. BULKLEY asked Dr. Robinson whether he ever had observed a case of lupus erythematosus of the scalp without some lesions on the face.

DR. ROBINSON saw and exhibited to the Society one case of lupus erythematosus of the scalp without any lesions of the face.

DR. KLOTZ thought that the thin, paper-like condition of the skin and the absence of a sharp or raised border was unusual for lupus erythematosus.

DR. MORROW had immediately made the diagnosis of lupus erythematosus, still he had not thought it injudicious to make a trial with specific treatment to eliminate syphilis as a possible factor. The leukoplakia of the mouth with occasional excoriations formed an unusual complication for lupus erythematosus, and was indeed misleading in diagnosis. The mouth lesions had lately been treated locally with strong solutions of chlorate of potash, and under the influence of mercurial plaster the localized infiltra-

tions of the scalp had receded, but this did not strengthen his belief in the syphilitic nature of the case.

Contribution to the Histology of Psoriasis.¹—DR. PIFFARD read a paper with this title.

DR. BRONSON expressed surprise that the author had found the stratum granulosum playing such an important part in psoriasis. It had been stated by Ranvier and others that this layer invariably disappeared in psoriasis and other inflammatory diseases affecting the epidermis.

DR. FORDYCE did not consider the proliferation of the stratum granulosum peculiar to psoriasis; he had observed it in other chronic diseases as lichen planus. He did not consider it probable that the active process of psoriasis commenced in the stratum granulosum, but rather in blood vessels of the papillary layer.

DR. SHERWELL believed, of course, that some pre-inflammatory condition must exist in the derma before the stratum granulosum could undergo any change. Dr. Piffard seemed to lay too much stress on the change of this layer of cells alone in the disease under question.

DR. ROBINSON said the case was evidently a very chronic one; he had examined sections from acute, as well as from many chronic cases, without finding the disappearance of the stratum granulosum as mentioned by the author. Like Dr. Fordyce, he had found similar conditions of the rete in other chronic diseases—how much of it was due to the psoriasis process in the present case was difficult to say. He had observed great changes in the rete; the changes in the stratum granulosum he thought was rather a result than the essential process of psoriasis. Cells with nuclei in the corneous stratum were found frequently in other diseases. He had some doubts about the changes in the stratum lucidum.

DR. ELLIOT could not see how the author of the paper could discriminate between the conditions belonging essentially to the psoriasis itself and those engrafted upon them through the pumice stone treatment. Precisely similar changes were found in the rete and increase of the stratum granulosum in warts, in lichen planus, in nævus verrucosus, in cystadenoma of the sweat glands shown at the meeting, and also in many other pathological phenomena of the skin. It would not appear therefore, to him, that they could be regarded as an essential part of inveterated psoriasis. In opposition to Dr. Robinson he would locate the first changes in psoriasis in the derma and not in the rete. He was glad to have heard the paper and it would lead him to pay more attention to the stratum granulosum in the future.

DR. PIFFARD in reply to Dr. Bronson, said that the photographs which he had presented answered the question in regard to the disappearance of the stratum granulosum. He had described only what he had seen, and had tried to trace the connection between the different conditions which he had found only as far as they belonged to this case, without drawing conclusions as to psoriasis in general. He did not consider the changes in the stratum granulosum as peculiar to psoriasis either. What he wanted to emphasize was:

First, that there has been too little attention paid to the stratum granulosum and its changes. He had not meant to consider the question in

¹ See page 132, April Number of this Journal.

which part the process originally commenced, nor whether the etiological disturbances were vascular or neurotic. There was in this case decided evidence of an abundant proliferation in the rete, in which there exists great thickening and probably has existed for years.

Second, he wished to place the question before the Society ; with this chronic thickened condition of the rete before you, how are you to cure the case ? how are you to bring back the thickened rete to its natural condition ?

DR. ROBINSON asked whether Dr. Piffard meant that a thickened rete cannot return to normal condition.

DR. PIFFARD answered, he meant indeed in an inveterate case like the present one that the thickened rete could only with difficulty return to normal condition.

DR. ROBINSON thought that it might be brought on by the internal administration of arsenic.

DR. CUTLER thought Donovan's solution (of mercury and arsenic) would have effect.

DR. KLOTZ said in less extended cases caustic potash might be applied in milder solutions, however, than originally recommended by Hebra. Pilocarpine had not proved efficient in psoriasis, although it did good service in similar conditions.

DR. ELLIOT showed microscopical sections from a case clinically of *nævus unius lateris*, but which proved to be an adenocystoma of the sweat glands. He called particular attention to polypoid ingrowths into the canal of the sweat glands. The same condition he had observed in sections from the case in Doutrelepon's Clinic, but the fact had not been mentioned by the author.

Reports on Cases Presented at the Last Meeting.—DR. BULKLEY reported slight shrinkage of the congestive lesions on the face of girl, under internal use of hydrastin muriate in a 1 per cent. solution, of which she was now taking twenty-five drops three times daily.

DR. FORDYCE reported entire disappearance of patch on hand under mixed treatment and mercurial plaster.

DR. SHERWELL saw continued improvement in his case of gangrene of fingers from syphilitic arteritis, from moderate doses of iodide of potash.

DR. CUTLER could not report great change in case of pseudo-erysipelas.

DR. PIFFARD's case of bullous eruption of the hands healed within one week.

DR. FOX called the attention of the Society to the difference in the action of dermatol from the original manufacturers and Merck's bismuth subgallate, which was claimed to be identical with dermatol and frequently sold as such. The action was quite different and its effects in a number of cases had been very undesirable, while the real dermatol had a soothing effect.

DR. BRONSON had seen excellent effects in a case of ulcer of the leg, from dermatol, at the City Hospital ; when the supply of the drug gave out the ulcer got worse again, and when later a new supply was obtained, no improvement, but rather a worse condition followed. This result may have been due to the difference in the drug mentioned by Dr. Fox.

As to gallacetophenone, several members reported moderate success, and others none at all.

DR. FOX remarked that, to test any new drug in skin diseases, one side of the body or one extremity should be treated with the new drug and then be tightly covered, while the other side should be treated by some old remedy, the effect of which was known.

DR. KLOTZ asked whether any member of the Society had ever observed poisonous effects from the external use of chrysarobin. He had been under the impression that a case of poisoning from chrysarobin had been published soon after the introduction of the drug, and therefore had been very cautious in its use.

None of the members present had observed any symptoms of poisoning from chrysarobin, and all seemed under the impression that pyrogallol only was dangerous.

(To be Continued).

Selections.

Treatment of Vesical Tumors. DR. BAZZ. (*Report of Paris Academy The Med. Weekly*, February 17, 1893.)

The indications for operation are pain, frequent calls to urination hæmaturia, retention, etc. Palliative treatment consists in the formation of a urinary fistula, established in the hypogastric region. The author has performed supra-pubic cystotomy fourteen times, and finds the most successful plan is to cut away the entire growth with the knife, from whatever region of the bladder wall it may originate. Division of one or both recti-muscles may be necessary, but the bony wall of the pelvis need not be interfered with. Inversion of the bladder may facilitate the operation, but is not essential. The incisions made in removing the tumor are to be sutured if possible, but where one or both ureters are involved complete closure of the wound may not be possible, and it may be better to leave the artery clamps on and to plug the bladder. The incision into the bladder should be closed when possible. Syphon-tubes can be dispensed with.

CHARLES W. ALLEN.

Treatment of Bubo.—SPIETSCHKA (*Prager. Med. Wochens*, No. 34, 1892).

The writer advises early and complete removal of the diseased glands, or if suppuration has occurred a small incision and removal of detritus by means of a curette.

Welander has given the following formula with the view of producing abortion of bubo.

℞. Hydrag. Benzoatis gr. V
Sodii Chloridi gr. jss.

Ag. Destil. ʒj

M.S. m. XV to be injected.

This causes some pain and does not always succeed.

In twelve cases in which this was recently tried, a small incision being also made because of fluctuation, a cure was obtained on an average of twenty-eight days.

In Pick's clinic compresses moistened in acetate of alumina are found less irritating to the skin and can be left on for two days. At times one injection of the one per cent. benzoate of mercury is not sufficient, and at others the method succeeds even after fluctuation is present. In sixty-two cases treated, over thirty-seven per cent. were cured by the injections alone, while in sixteen cases a free opening and resort to the curette was found necessary later on.

CHARLES W. ALLEN.

A Clinical Study of the Gonococcus. DR. CARPENTER (*University Medical Magazine*.)

In this thesis, to which was awarded the Martin prize, the writer, a member of the graduating class of the University of Pennsylvania, gives a resumé of the question as far as literature is concerned, and the result of his personal experience in some thirty-five examinations, including twenty of gonorrhœa. From these observations, the conclusion was quite unavoidable that there exists in blenorrhagic pus a microbe which is not found elsewhere.

In regard to Roux's method, which the reporter tested several years ago, publishing his results in this Journal of 1887, the author says "The proof is very positive that the gonococcus is always decolorized after staining by Roux's method. Certain other micro-organisms may show a similar reaction, but neither in grouping nor in size are such organisms similar to gonococci. The peculiar characteristics of the gonococcus in itself enables the examiner to give an almost positive diagnosis, and when this is confirmed by Roux's method of decolorization, it practically leaves no room for doubt. To justify such a positive statement, however, the pus should be obtained directly from the secreting surface.

CHARLES W. ALLEN.

Gonorrhœal Implication of the Sebaceous Glands of the Penis. DR. TOUTON (*Berliner Klinische Wochensh*, No. 57, 1892).

The author reports two cases in support of his previous paper (*Ueber folliculitis preputialis et paraurethralis gonorrhœica. Archiv. für Derm. und Syph*, xxi., p. 15,) and gives observations which go to show that the sebaceous glands of the penis may become affected in the gonorrhœal process, and make it probable that the greater part of the so-called paraurethral and preputial ducts are sebaceous glands altered by the disease.

It is further demonstrated that the gonorrhœal virus is capable, also, in this tissue, of causing exuberance and alteration in the epithelium; and finally, is shown, the possibility of chronic gonorrhœal inflammation persisting here as well as inflammation, which lasts after the disappearance of gonococci, or which may exist where they have been absent, depending upon other micro-organisms.

CHARLES W. ALLEN.

Incontinence of Urine in Young Children.

DR. POWERS counsels the following procedure which, of course, is applicable only to male children. He seals the orifice of the prepuce with collodium, at the moment of retiring. If only a small amount is passed, the prepuce will be found slightly distended in the morning. If the desire to urinate wakens the child, he can easily remove the film himself. By this method, Powers has rapidly obtained, sometimes in fifteen days, complete suppression of nocturnal incontinence.

The procedure is so simple as to merit a trial.



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Original Communications.

HIDROCYSTOMA.

BY

A. R. ROBINSON, M. B., ETC.

(With Colored Plate.)

Professor of Dermatology in the New York Polyclinic; Attending Physician to the New York Cancer Hospital, etc.

AT the eighth annual meeting of the American Dermatological Association, held at Highland Falls, in August, 1884, I read a paper upon miliaria and sudamina, and described, among other forms of lesions having a supposed relationship to the sweat gland apparatus, a peculiar eruption seen especially upon the faces of women in middle and advanced life who sweat freely upon that part and who expose it to warm vapor, and hence is not infrequently seen upon the faces of washerwomen, although not confined to them. The portrait accompanying the present article was exhibited at the meeting and examined by all the gentlemen present. The remarks made by me at that time in reference to this disease were based upon a clinical and microscopical study of several cases, as when the artist drew the portrait I had four patients present for his study; and from the original of this portrait, I subsequently, within a few days, removed half a dozen lesions for histological study.

Although the eruption had probably been previously seen by other dermatologists, this was the first time, I believe, that the disease had been studied and described, and hence Dr. Hyde and Dr. Hardaway, who were present at the meeting, in their respective works upon skin diseases refer to it as a form of sudamina described by Robinson.

In my work "Manual of Dermatology" published in 1884, I described the disease under the heading sudamina and also gave a microscopical drawing showing the anatomical seat and character of the lesions.

I have referred to these historical facts in connection with this disease, as some later writers are not aware of them and have given to another the credit of first describing the affection. In 1886, Dr. G. T. Jackson described in the *Journal of Cutaneous and Venereal Diseases* under the title of dysidrosis of the face, an example of the affection, the paper being illustrated by a good chromo-lithograph of the eruption. It was probably the existence of this portrait that led most subsequent writers—only a few have written upon the subject—to refer to the disease as an affection of the face described by Dr. Jackson, for, had they read the article carefully they would have noted that he says that the eruption in his case "corresponded in its location, appearance and etiology to the sudamina of the face of Robinson, and is doubtless the same disease."

The affection is not a very infrequent one in New York city as I have certainly seen not less than thirty or forty since 1884. I do not know the exact number as I do not keep statistics of all my cases of skin diseases, preferring, if I can do so, to make a complete study of half a dozen cases of one disease to an analysis of 5,000 cases for showing relative frequency of this or that disease. As all the cases of this disease seen by me have been so similar in appearance and history, I have concluded that it constitutes a clinical entity, and on account of its frequency and character deserves or requires a special name.

All of the cases which have come under my observation, with one exception, have been in women in middle life or older, although there are no reasons, as far as I know, why it should not appear in quite young persons, and perhaps does in some cases. I saw one case this year in a young man, 28 years of age, in whom the eruption was limited to the lower half of the right side of the nose. In the majority of the cases the women have been doing general housework, housewives doing cooking, washing, etc., and whilst some of them did but little if any washing, the rule was that they attributed the eruption, or a great aggravation of an already existing one, to washing, as that kind of work, excessive exercise in a warm vapor atmosphere caused them to sweat very much. I have seen it also in cooks who did no washing, also in persons who did very little cooking or washing, and finally also in those who neither cooked

nor washed. In my cases, however, the rule was that the disease appeared in middle-aged women who habitually perspired greatly, and who did washing over tubs, thus exposing the skin of their face to the action of a warm, moist atmosphere. All of the cases have been worse in summer than in winter, and in many of them the eruption would almost, if not entirely, disappear in winter, whilst in others it would entirely disappear during cold weather. In a case described by Hallopeau, and in whom the disease was limited to the nose, the eruption was more severe at the menstrual period than at other times, and it appeared to him to be much influenced by the condition of the nervous system, an emotional state aggravating the condition. In this case the eruption was also worse in summer than in winter.

The eruption usually occurs upon the regions occupied by it in the accompanying portrait, that is, it appears upon the lower part of the forehead, the orbital region, the nose, the cheeks, and often the upper and lower lips and the skin. I have not seen it upon the lower jaw or neck, or upon the rest of the body. In a case reported by Jamieson, of Edinburgh, the eruption was confined to the nose and right side of the forehead, temples and cheek. The woman was 45 years of age, and perspired freely and easily upon the right side of the body, and only on rare occasions and when much excited, to a slight degree upon the left side. When first seen by Dr. Jamieson, there were large beads of perspiration on the right side of the forehead and corresponding cheek, whilst the left side was absolutely dry.

The lesions are either discrete or situated closely to each other, but it is not usual to find them in any considerable number closely crowded together, especially if they are not very numerous. When perhaps 100 to 200 lesions are present—and I have seen such cases—then the lesions over a greater part of the affected area may be closely situated to each other, but when few lesions are present they are usually discrete.

The individual lesions appear as tense, clear, shiny vesicles, obtuse, round or ovoid in form and varying in size from that of a pin head to that of a pea. They are, at first, always deep seated, that is, their base reaches deep into the corium, but on account of their size they are also usually more or less elevated above the general surface. The smaller ones, especially, bear considerable resemblance to a boiled sago-grain. The larger lesions sometimes have a darkish blue tint, which is most marked at the periphery. This is well shown on the chromo-

lithograph. From the drying up of the contents, disappearing lesions may have a whitish appearance like that present in cases of milium. I have not been able to recognize with positiveness the presence of an excretory sweat duct orifice over the central part of an individual vesicle. The skin over the lesions is not

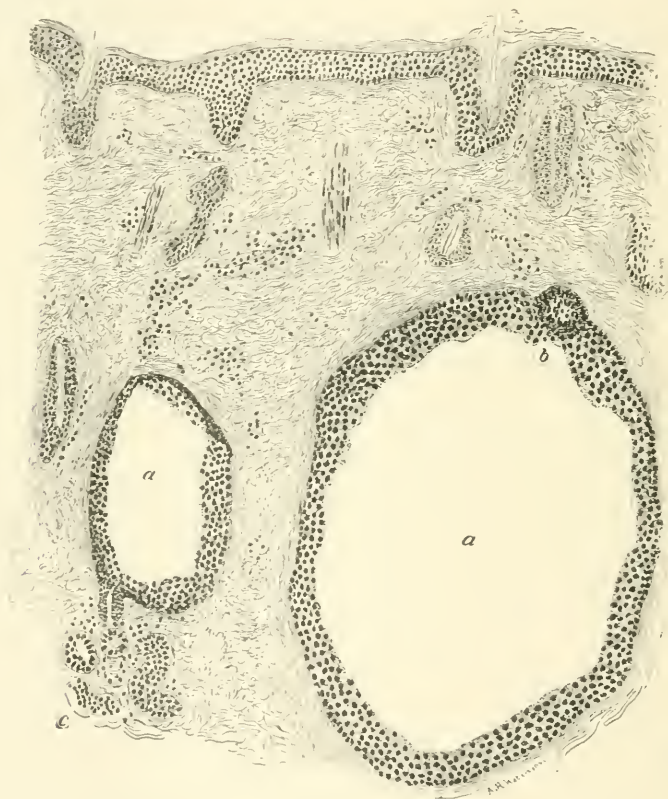


FIG. 1.

(a) Large and small cyst : (b) excretory sweat duct at place of obstruction : (c) coil of sweat gland.

inflamed, and there are no signs of inflammation present in any part of the affected region. If the lesion is a large one—slight circulatory disturbance—a mild hyperæmia is often noticed at its periphery. There are no subjective symptoms, or the eruption may be accompanied by a slight sensation of tension or smarting.

The contents of the vesicles are clear and never change to a yellowish color, but dries up and the lesion disappears, unless mechanically injured, without rupture, often lasting one, two or several weeks, leaving the part in a normal condition or followed by a slight temporary pigmentation. In the late stage of evolution the dried up contents sometimes appear whitish, like in milium. If the vesicles are ruptured the contents are found to be always slightly acid and never alkaline.

Histology. The excised portions of skin were placed in Müller's liquid and afterward treated in the usual way for histological study. In Figs. 1, 2, 3 are shown the different stages in the formation of the vesicles, and also their topography and manner of origin. Microscopical examination of the sections showed the following condition in the different structures of the skin in the active stage of the disease. The corneous layer and the rete mucosum were in an apparently normal condition, that is, the corneous cells appeared unchanged in character and were in their normal relations to each other, whilst in the rete a similar condition was present, the sweat gland passing through it was normal and in no part were there signs of vacuolation or of a degenerative process, or of an excessive transudation of serum into or between the cells. The papillary layer was normal in the early stages, but if the lesion became large sized and approached the rete, as in Fig. 3, the circulation was more or less interfered with from pressure and consequently a few more perivascular leucocytes than normally are seen, were present.

In the upper part of the corium, depending upon the size of the lesion and its duration, the larger the lesion and the longer its duration, a perivascular leucocyte invasion was present in moderate degree, as shown in Fig. 3. The sebaceous glands and hair follicles are normal. In Fig. 3, which represents a well developed lesion, a portion of the vesicle lies in this part of the corium.

In the lower part of the corium and in the subcutaneous tissue, besides normal sweat-glands and hair follicles, the following abnormal conditions were found. The secreting portion of some of the sweat glands have an enlarged lumen from dilatation of the tube and contraction or compression of the epithelial cells against the basement membrane, the lumen being filled with liquid and a granular material resembling that usually seen in normal glands, but in increased amount. As I have observed this condition in cases of simple hyperidrosis, it may be re-

garded, in my opinion, as merely showing marked activity of the physiological process. Other glands showed granular contents without any enlargement of the tubes or dilatation of the lumen. With the exception of those few with enlarged coil tubes, and those ducts connected with the cystic formations of the sweat-glands, both the secretory and excretory portions appeared to be normal. In Fig. 2 I have represented a condition met with in a gland having an enlarged coil tube and dilated lumen. The drawing shows a portion of an excretory duct situated a short distance about the coil portion of the gland, that is, a portion in the lower part of the corium. The part of the duct



FIG. 2.

represented shows some dilation of the duct and lumen the entire length, the change being most marked the further distant from the coil part.

At a the duct is cut across somewhat obliquely, but the size of the lumen is easily recognized as being much wider than in the normal condition, and the contents are abnormally granular in character. The cell collection around the duct is probably a normal condition, as lymphoid corpuscles are always present in considerable numbers around the lower part of the sweat-glands, especially in the coil area. As there was no cyst directly above this dilated duct and within the excretory duct area in any of

the sections examined, it is evident that in Fig. 2 is to be seen a very early stage in the formation of the vesicular lesion of the disease I am describing. Judging from this gland alone it would seem that the lesion arises from obstruction within the lower part of the corium, next the subcutaneous tissue, to the passage to the free surface, of the contents of a sweat gland in an over active functional condition.

In Fig. 1 is shown a section which fortunately included two lesions in different stages of development, and also the connection of both with sweat glands, in the smaller lesion the duct entering at the base of the vesicle and in the larger one leaving it at the upper part. By studying Figs. 1 and 2, it is easy to learn the anatomical relations of the lesions in this disease and see that the vesicles arise from a cystic dilatation of the excretory sweat duct lying within the corium. On the right half of the drawing is seen a small cyst connected with the sweat gland c, and on the left half of the drawing is a much larger cyst connected with the excretory duct seen cut transversely at b. Let us study the character of these two cyst-like formations. At c is seen the coil portion of the gland. Nothing abnormal was to be observed, unless it was that the contents of the lumen were more granular than usual. The short, excretory duct leading to the cyst was perfectly normal, not showing any dilatation like in Fig. 2. The cyst a, was a small one, and appeared to the naked eye a pin head sized, deep seated vesicle. The cyst contents have disappeared but were no doubt a clear liquid of acid reaction as such was the character of all examined in reference to this point. A slight albuminous substance clung to the wall of the cyst. The excretory duct is seen very distinctly entering the cyst at the lowest right hand-corner. The entire wall of the cyst is lined with epithelium.

In the larger cyst no sweat gland is visible in this section, although its special gland was seen in other sections. At the upper part, however, at b, is seen the place where the excretory duct communicates with the cyst. This cyst extends further upward and further downward in the cutis than the smaller one, but it may have commenced at about the same level. The contents of this one have also disappeared. The walls are lined throughout with epithelium as in the smaller lesion. In Fig. 3, is shown under a somewhat lower power another vesicle which has encroached still nearer the epidermis at the same time that it extends downward into the subcutaneous tissue.

This vesicle was larger than the larger one of Fig. 1, but it

also showed disappearance of the contents, and the presence of epithelial cells, which completely lined the cyst wall.

A consideration of the conditions present in Figs. 1, 2 and 3, shows that the vesicles arise from dilatation of the excretory duct of the sweat glands at some part of its course within the corium, and that in these lesions the place of formation was in the lower part of the corium. That, however, it is not a passive dilatation as in an ordinary retention cyst is shown by the marked peculiarity, that whether the cyst be large or small, there is such a rapid proliferation of the epithelium lining the

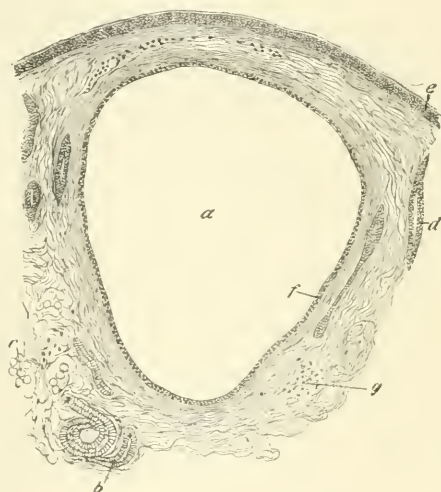


FIG. 3.

Section of vesicle from forehead. (*a*) vesicle; (*b*) coil of sweat gland; (*c*) fat tissue; (*d*) hair follicles cut obliquely; (*e*) epidermis; (*f*) epithelial cells lining cyst wall; (*g*) round cell collection.

part of the duct affected, that the entire cyst wall is lined by this epithelium.

Such was the condition formed in six lesions removed in a comparatively early stage of formation. These were not the changes found by Jamieson in his case; but I am satisfied that had he removed an early lesion instead of a very late one, similar changes would have been found. In his sections there were no cysts in the corium and the excretory ducts in this part were normal, as far as could be studied, for the sections did not reach to the gland coil. In the rete he found a vesicle formation of similar structure to that observed in pompholyx (dysi-

drosis of T. Fox), but no connection could be traced between the sweat ducts and the vesicles. From an observation which I will publish within a few months I believe the changes he observed were secondary and not primary, but as his observations differ from mine I have quoted them.

As regards the character of the contents of the vesicles, they are always, in the earlier periods at least, liquid and clear and slightly acid, characters similar to those present in sweat drops upon a clean cutaneous surface. This liquid is collected within an excretory duct deep in the corium and far removed from the blood vessels of the papillæ. The connection of the cysts with the sweat coil is proven by the sections, hence we have here a positive proof that a liquid corresponding in character with sweat as it appears upon the free surface is formed by the sweat glands or excretory duct or by both. The theory, therefore, that the sweat glands are fat-producing glands only and not sweat-producing, cannot be correct when we find such a condition during a state of hyperidrosis. Six years ago I maintained that my sections disproved the theory that sweat comes from the papillary blood vessels and not from the sweat glands and am still satisfied of the correctness of my position at that time.

Why the lesions form is not easily answered. One could say that the duct becomes obstructed by detached epithelium, the result of the excessive hyperidrosis, but the obstruction in that case would probably occur where the lumen is narrowest and elasticity of surrounding tissue least, that is, in the epidermis. Furthermore, the disease is rare, whilst hyperidrosis, at some time or other, is almost universal. It cannot be from any anatomical changes in the epidermis or the lesions would be more superficially seated. It cannot be from the difference in density between the connective tissue of the corium and that of the subcutaneous tissue that causes the lesions to form about the place of union of those parts, for the cyst enlarges subsequently in all directions. The nature of the contents of the vesicles show that the coil part of the glands is normal or acid sweat could not form so rapidly. The abnormal condition must reside primarily in the excretory tube or in the surrounding connective tissue, causing obstruction to the outflow of the sweat.

Diagnosis.—The eruption bears some resemblance to sudamina crystallina, pompholyx (dysidrosis) eczema and adenoma of the sweat glands.

Sudamina, as may be seen by the accompanying Fig. 4 is caused by retention of sweat within the corneous layer, the cells forming the wall of the duct becoming separated and allowing the sweat to infiltrate the corneous layer and pushing aside the cells, collect so as to form a dewdrop-like lesion. Clinically, the lesions of sudamina-crystallina appear but very rarely upon the face, they are more superficially seated and have a thinner covering. The nature of the contents is similar in both cases and both are caused by retention of sweat within an excretory duct area, and hence, in my first paper, I

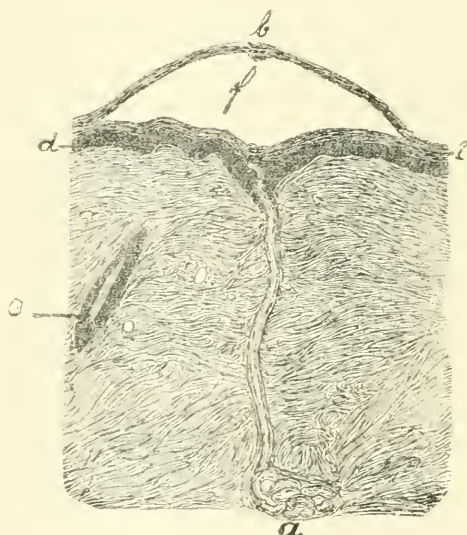


FIG. 4.

Vesicle of sudamina crystallina—(a) sweat gland; (b) roof of vesicle, formed of corneous lamellae, and showing at (b) the orifice of the sweat duct; (c) hair follicle, cut obliquely; (d) rete; (e) corneous layer; (f) vesicle.

preferred to describe it as a form of sudamina, giving this term a wider meaning than it previously had, making it synonymous with any lesions caused by retained sweat, and then using qualifying words as crystallina, miliaria, etc., for different clinical forms. As, however, sudamina is not a lesion caused by sweat retained within an excretory duct, and as, furthermore, in the disease I have described, there is a rapid proliferation of epithelial cells in sufficient numbers to always line the cyst wall, as finally the disease has definite clinical character and represents a

clinical entity, it appears to me to be advisable not to use the term sudamina of the forehead, as I have already done, but to coin a new one for the affection.

After taking into consideration the method of formation and the anatomical character of the lesions, my friend, Dr. Frank P. Foster, agreed with me that the term hidrocystoma would not be subject to any special objections and would be preferable to a long, unspeakable word which perhaps would better represent the pathological process. The lesion is a cyst but not a pure retention cyst, and therefore the term cystoma is not altogether inapplicable.

From eczema the eruption is diagnosed by the acid reaction of the contents, and by the absence of inflammation and subsequent crusting. The nature of the contents and the clinical history make the diagnosis from adenoma of the sweat-glands easy, but in a photographic representation there is much resemblance.

Drs. Jackson, Jamieson, Rosenthal and Hallopeau have all described the disease under the name of dysidrosis. The disease, however, corresponds in no respect with dysidrosis, as described by Tilbury Fox, Hutchinson, myself and others, except that in both the vesicles may have the boiled-sago-grain appearance. The disease dysidrosis or pompholyx may be defined as an acute inflammatory affection, characterized by the symmetrical development upon the palms of the hands, and generally also upon the soles of the feet, of deep-seated, clear vesicles, usually grouped, which afterward become opaque, and in a few days disappear by rupture or absorption, leaving a non-eczematous skin behind. As the disease I have described in this article bears no relation either from a clinical or an anatomical standpoint with dysidrosis, the term should not have been used for the affection, even if it were clear that the condition did represent one of difficult sweating, for it was clearly not the same disease already described under that name. Within a few weeks I will take up the subject of dysidrosis (pompholyx) and show once more that the vesicles in that disease do not come from the sweat glands, and at the same time discuss some other interesting conditions I have lately studied in connection with sweat gland diseases.

248 West 42d Street.

ON THE OCCURRENCE OF TERTIARY LESIONS OF SYPHILIS AS
THE RESULT OF DIRECT LOCAL INFECTION, WITH GENERAL
REMARKS ON SYPHILIS AS AN INFECTIOUS DISEASE.

BY

HERMAN G. KLOTZ, M.D.,

New York.

(Concluded from Page 284.)

ASSUMING then the existence of such a bacillus, it looks almost as if tertiary syphilis would have to be considered as a disease of its own, separated from syphilis proper by its different origin and clinical character. For, as I have stated before, this bacillus or micro-organism would not be identical with that of early and virulent syphilis, certainly not identical in its action. The opinions of different authors on the relations of the tertiary manifestations to syphilis are by no means unanimous nor of a decided nature, and indeed, very little positive knowledge exists on this important question, hypothetical, sometimes very uncertain or obscure opinions, taking the place of positive science. Following Finger, who, in the paper mentioned before, reviews the position of a number of authors, it is accepted almost everywhere in literature, that tertiary manifestations do not bear the same etiological relations towards the virus as the primary and secondary ones. Generally we meet with the tendency to consider the appearance of tertiary symptoms as an abnormality, as an irregular development which is not due to the virus alone but to other more accidental causes. It is impossible to cite here the opinions of every single author, but it appears that the majority, on the strength of clinical experience, do not consider the tertiary stage as a direct consequence of the action of the syphilitic virus, but as a consecutive specific sequel or as a diathesis, that in this stage the original virus has become completely eliminated or extinct, or at least, that the tissues have undergone a modification in consequence of the preceding process of syphilis. Finger, himself, adduces several reasons in favor of the position that the tertiary manifestations cannot be produced in the same manner by the virus of syphilis as the primary and secondary ones. Some of his arguments are by no means indisputable, but cannot be

all considered in this paper. The principal purpose of Finger's paper is to call attention to the importance of the effects of the products of tissue change resulting from the virus of syphilis besides the effects which are due to the micro-organisms themselves. He attributes to the chemical products the general symptoms preceding and accompanying the general outbreak of secondary syphilis on the one side and immunity from infection with the virus of syphilis on the other; the latter, under certain circumstances, cited above, may be acquired without the previous occurrence of primary and secondary symptoms. So far, I am ready to accept Finger's opinion, although hypothetical, as he avows himself. But he further concludes, that tertiary manifestations and products of tissue change must have an intimate etiological connection, because the former, like immunity, the product of the toxins, can occur independently of the previous appearance of primary and secondary symptoms under the same conditions as immunity; and second, because tertiary symptoms like the general symptoms of the early stage, which are equally due to the intoxication with the toxins, show the same prompt chemical and therapeutical reaction against iodine and its preparations, while the virulent primary and secondary symptoms are readily influenced by mercury and not by iodine. Even admitting as proven the cases of the appearance of tertiary symptoms in mothers immune by the bearing of syphilitic children, which, as has been mentioned, has been doubted by some authors, it does not appear that these cases are frequent enough to establish a rule or general law. In regard to Finger's second argument, the chemical reaction against iodine, I cannot consider it a very strong one. In reality no such decided difference in the action of mercury and iodine on the products of syphilis in the different stages does exist, as to base upon it an actual law of chemical reaction; early secondary symptoms may disappear and quite often very promptly do disappear under treatment with iodide of potassium alone, and on the contrary, numerous tertiary affections are readily affected by mercury, sometimes where iodine does not exert any beneficial action at all. I therefore cannot consider Finger's opinion as proven or even as rendered very plausible, much less can I see a convincing argument in his further conclusions, when he says: "Chronic intoxication with the products of tissue change due to the syphilitic virus may create that modification of the reaction of the organism, which we design as immunity. If the toxins are less vir-

ulent and the organism is more resistant, they may be restricted to the reaction of immunity. But if the virulence of the chemical products is greater and the reactivity of the organism lower, the modification of reaction becomes marked, it turns into a specific cachexia, into a sequel." (The word "Umstimmung", used in German, is difficult to translate; modification does not render its exact meaning; a more literal translation of this word of rather uncertain significance would be "change of pitch.") I must confess, that I cannot understand Finger's reasoning or forming conclusions; it seems unintelligible that the same cause, the intoxication with the products of tissue change, should in a mild degree cause immunity, thus acting rather beneficially, and in a higher one should cause the local processes constituting the tertiary symptoms in all its disastrous forms, even if we accept the existence of some local irritating factor to account for the production of the local lesion. Experience, on the contrary, shows that the most aggravated forms of tertiary symptoms are frequently observed in cases in which the primary and secondary symptoms including the general symptoms have been very mild, so that only a moderate degree of virulency would have to be expected, while severe general symptoms, pronounced anæmia, high fever, low state of nutrition accompanying and succeeding the secondary eruption, are by no means regularly followed by tertiary manifestations; that a severe and prolonged secondary stage renders the appearance of tertiary syphilis less probable. While I therefore agree with Finger on the importance of the toxins for the production of the general symptoms of the early stages and on immunity, I cannot see that he has brought forward sufficient arguments in favor of the hypothesis that the tertiary symptoms are also a product of the chemical action of the virus of syphilis. I am inclined, however, to recognize the influence of the toxins as the active factor in the production of certain conditions, mostly visceral lesions, which are generally attributed to syphilis, but in which the anatomical changes do not seem to differ at all from the same conditions if caused by other agencies, as intoxication with alcohol or lead, or probably by gout, etc., and which do not exhibit any really specific qualities. I am speaking of the diffuse interstitial inflammation with the formation of sclerotic connective tissue in the kidneys, liver and spleen, so often associated together, similar processes in the lungs, and other organs, which may be found alone or simultaneously with characteristic gummatous formations, but

particularly of the chronic diffuse systemic affections of the central nervous organs which are met with in syphilitic persons with such regularity that their more or less intimate relations to syphilis can hardly be considered doubtful. It is certainly not justified to count these affections among the tertiary manifestations of syphilis with which they have nothing in common, neither anatomically nor clinically.

Among the authors whose opinion has been mentioned by Finger, probably the most sharply defined one is that of Lang of Vienna (Lectures on Syphilis, Wiesbaden). He believes in an organic contagium of syphilis and thus describes its relations towards the pathological processes: "At first the general distribution of the contagium gives rise to the irritative processes, which appear in the shape of hyperemic, slightly inflammatory infiltrations and hyperplasias. In the majority of cases the normal state is restored, only exceptionally here and there infiltrations and hyperplasias fail to be absorbed, become organized into more or less permanent structures (nodes of the skin and mucous membranes, tophi).

The gumma requires for its development, that there remains in the tissue a residuum of the contagium of syphilis most probably in a considerably changed condition, which, irritated by some accident into renewed propagation, favors the local production of tissue bearing the character peculiar to the gumma. Although it is probable that the disease germs are mostly those which, in the locality of the gummatous process, have for a long time rested in a state of quiescence, the possibility must be conceded, that such a remnant of the contagium, if carried to some other locality, may there, just as well, produce gummatous conditions."

Lang assumes, as you see, in the tertiary lesions of the disease the presence of an organic contagium, the contagium of syphilis in a modified condition. Now once conceded the presence of such an organic contagium of a micro-organism, is there any good reason, why this parasite should not be able to produce similar conditions if brought under favorable circumstances into the tissue of another individual? why tertiary lesions should not start from inoculation of tissue containing this parasite? It therefore appears, that from Lang's opinion it needs but one step further to arrive at my own postulate. It remains to show, however, that under such a theory the entire pathology of syphilis can be explained in a logical, plausible, and probable manner.

As I have stated before, syphilis in its early, virulent stages, ranks closely with the acute exanthemata, closest probably with variola, to which it has long been associated by the similarity of the popular names, pox and smallpox. Syphilis has in common with the exanthemata the period of incubation, the acute outbreak of an eruption of the skin under more or less intense general symptoms of fever, etc., the symmetrical, more or less general distribution of exanthema, the participation of the mucous membranes of the throat and mouth, and as a rule, the immunity against infection with the same disease. It differs in so far as it is not limited to a single eruption, but may appear in repeated general or more localized relapses, phenomena which although rarely, are seen occasionally in the other diseases, particularly in scarlet fever. It apparently differs besides by the mode of the introduction of the virus by local inoculation. We know, however, so little about the ways and means through which the virus of the other acute exanthemata enters the organism, that perhaps in reality this difference may not be very great, or may not exist at all, for variola, at least the occurrence of direct inoculation of the contagium into the healthy skin or into small accidental wounds, is an established fact. A further difference seems to consist in the way syphilis is influenced in a specific manner by mercury. It has, therefore, been for some time my conviction that the efforts of those who were trying to find the pathogenetic parasite of syphilis, ought to be made in the direction of the acute exanthemata. The presence of some organic parasite as the etiological factor for these diseases seems almost a necessity, although so far no investigations have led to absolutely certain results. So far as I know, bacteriologists are looking for micro-organisms different from the bacilli of tuberculosis, leprosy and similar ones. It has given me great pleasure, lately to find, that a bacteriologist has, from his own standpoint, come to the same conclusion, which I have reached from the clinical side. In the *Centralblatt für Bakteriologie* (Dec. 31, '92. Vol. XII. 25) F. Doehle, First Assistant to the Chair of Pathology in the University of Kiel, has published the results of his investigations in regard to measles, scarlatina, smallpox and syphilis. He believes to have found protozoa of similar nature in all these diseases. Without accepting Doehle's discoveries as a final solution of the question, they seem at least to encourage the opinion, that in the active period of syphilis a contagium is present, which in its form and action are different from any one present in tertiary syphilis.

We do not know what finally becomes of the parasites in the acute exanthemata, whether they are eliminated from the organisms with and by the natural excretions and secretions, whether they are destroyed by their own toxins or whether they remain in an inert condition to be responsible for some of the sequels which are occasionally observed. I shall allude only to the close relations between measles and tuberculosis. For syphilis it seems probably that partly by some of the agencies enumerated above, partly by the effects of treatment, the parasite may be entirely eliminated or destroyed or may be deprived of its original character, either by undergoing a material change of the original microbes themselves, or by producing a new species in a different form. Whether any such metamorphosis has been actually observed in any organic parasite, or whether it is possible, according to the present state of bacteriological science, I am not able to decide; but it seems that the biology of the micro-organisms is not positively known to such an extent as to exclude the possibility or probability of such an occurrence. This newly formed or modified organism would then remain in the human body either as residua, as Lang seems to believe, in certain localities or in a more or less general distribution. Investigations of Loomis (*Researches of the Loomis Laboratory*, Vol. I, 1890) on the presence of tubercle bacilli in the bronchial lymphatic glands of adults, have shown that in 40 per cent. of the cases examined (6 out of 15), the bronchial ganglia, none of them even enlarged, contained tubercle bacilli, and that in 19 per cent. of the cases of adults, who died of acute non-tuberculous diseases, the same bacilli were present. Pizzini (*Zeitschrift, f. klin. Medicin.* Vol. XXI, p. 329), who has made similar researches in the clinic of Prof. Torlanini, of Turin, comes to the same conclusion that tubercle bacilli are present in the lymphatic ganglia of individuals who died of acute diseases or by violence, in a proportion of not less than 42 per cent., and that some of the observations demonstrated in a convincing manner the possibility of the existence of tubercle bacilli in individuals of a strong, healthy constitution.

In the face of such facts, it will not seem to be absurd to assume a similar condition of a dormant existence for the parasites of syphilis. The appearance of tertiary symptoms would then take place whenever these organisms are called into activity by some accident, either by certain conditions of the individual which they occupy, or by some outside interference (trauma, chemical irritation, etc.). This would explain the well known

influence of other diseases which reduce the vital power of the patient, of prolonged want of sleep and other deprivation of great mental excitement and exertion, of alcoholism, of malaria, etc., which are generally recognized as favoring and to a certain extent causing tertiary syphilis; it would not come into collision with the opinion of the numerous authors, who look to insufficient treatment of the early stages for the principal cause of tertiary symptoms. *Syphilitic cachexia* and *marasmus* accompanying tertiary syphilis might, in their turn, be considered as the consequence of products of tissue change due to the activity of the parasite of tertiary syphilis.

It remains to mention one phase of syphilis, the explanation of which forms, perhaps, the most difficult problem; the precocious malignant syphilides and the early tertiary manifestations. Some authors, among them Finger and Neisser, deny the identity of these lesions with the real gummatous process and say that they may be the result of a mixed infection with the virus of syphilis and some septic poison. The frequent association with phagedenism of the primary lesion seems to speak in favor of this opinion. But admitting the tertiary character of these lesions, they may be caused by a particularly rapid transformation of the primary parasite into the secondary one under the influence of some unknown condition, so that both would become active at the same time and simultaneously exert their influence. The occasionally observed occurrence of secondary symptoms after tertiary manifestations, would not appear so unaccountable in the presence of two different micro-organisms, which may very well exist in the same organism at the same time.

Before I present a brief summary of what I have said, allow me, Mr. President and gentlemen, to ask your pardon for having taken up your time with abstract and hypothetical subjects. But I beg of you not to look upon this paper as the outcome of a cranky or morbid desire to bring forth something new and startling. What I have presented to you has forced itself upon my mind in the course of time and has been confirmed by later observations and by reading of current literature. The desire to submit such ideas to a scientific body able to judge, seems not unjustified and certainly excusable. I am far from expecting your ready approval of my opinions, but if one or the other point will appear worthy of your consideration and deliberation in the future, I shall feel amply satisfied. Allow me, then, to present in a few short theses the principal points of my opinion on syphilis:

1. Syphilis is caused by a micro-organism similar to those of the acute exanthemata; the primary and secondary local manifestations are due to the direct influence of this parasite, the presence of which in these lesions is proved by their contagiousness.

2. The general symptoms accompanying these stages and immunity are the result of the action of the toxines (Finger).

3. The micro-organisms, under the influence of their own chemical products or of treatment or in consequence of their natural innate character, are either eliminated or extinct or undergo some modification or produce a new kind or species of micro-organism.

4. This secondary parasite, which is similar to the bacillus of tuberculosis, can indefinitely remain in the organism in a dormant condition until called into activity by some accidental irritation.

5. It then produces the tertiary, gummatous manifestations, but not the diffuse chronic visceral affections like tabes, general paralysis, etc., which are the result of intoxication with the toxines of the primary parasite.

6. The secondary micro-organism is inoculable like the bacillus tuberculosis, and produces lesions identical with tertiary syphilis, but not primary syphilis.

7. Tertiary syphilitic manifestations may, therefore, be due to direct inoculation without the necessity of a primary or secondary stage.

42 East 22d Street.

Society Transactions

THE AMERICAN ASSOCIATION OF GENITO-URINARY SURGEONS.

SEVENTH ANNUAL MEETING, HELD AT HARROGATE, TENN.,
JUNE 20 AND 21, 1893.

DR. EDWARD R. PALMER, *President, in the Chair.*

Some Observations Respecting the Pathology and Pathological Anatomy of Nodular Cystitis.¹—By DR. SAMUEL ALEXANDER, of New York.

DR. JOHN P. BRYSON, of St. Louis, said he considered Dr. Alexander's investigations in this line of work extremely valuable. It is interesting to

¹ See page 245, July Number of this Journal.

note that these lymphatic nodules are situated in that part of the urinary tract which is developed independently of the anterior portion; that is, the embryonic urinary tract, and not the genital part. It appears that these pathological changes are limited to that portion, thus differing from tuberculosis, which occasionally affects the anterior urethra. Another interesting point is that we very often have a cystitis produced by a tubercular lesion which is not a tubercular cystitis. For instance, with renal tuberculosis the urine passing downwards and remaining a long time in contact with the deep urethra and trigone often excites a cystitis which is not a tubercular inflammation, and which may in many instances be relieved by local applications, but much more easily by the administration of some of the balsams, especially the sandalwood oil, perhaps with the addition of ergot where the prostate is attacked. Dr. Bryson inquired as to the direction of the infection in cases of tuberculous disease of the bladder, whether it is infected from the mucous surface, or through hæmatic channels, or by the lymphatic vessels from below. He has seen a great many cases of tuberculosis about the vesical neck and prostate which seem to have this latter mode of infection, so far as the histories go. Perhaps a solitary gland in the ilium is primarily infected, or there is a tuberculous patch on the peritoneum. The peritoneal fluid is well known to be a culture medium for the growth of tubercle bacilli. Such a lesion often seems to be followed (according to the clinical history) by a localized chronic tubercular pelvic peritonitis. Evidently, in those cases, the tubercle bacilli travel downwards, infecting the seminal vesicles, the prostate and lymphatic tissue.

DR. ALEXANDER, in answer to Dr. Bryson, said that, according to his observations thus far, the tubercular infection is very rarely hæmatogenous. In the cases of tuberculosis associated with enlargement of these lymphatic nodules, he has found that the infection was more marked towards the internal urethral region or the ureteral orifices, depending upon whether it was an ascending or descending inflammation; that is, from the urethra or the pelvis of the kidney.

DR. JAMES P. TUTTLE, of New York, inquired as to the source of the bleeding. Whether it came from an ulcer or from the distended vessels? Whether there was an ulcer over these nodules? Also, in those cases in which Dr. Alexander found the tubercle bacilli, whether there was a general tuberculosis or merely a localized lesion?

DR. ALEXANDER said the bleeding did not come from an ulcer; it came from the newly-formed blood-vessels, which were always very much engorged. The epithelium over the nodules is preserved, and no ulcer is formed. By merely touching these nodules with a sponge, free bleeding follows. In one of the cases referred to in his paper the patient was a man about 32 years of age, who had a tuberculosis beginning in the seminal vesicles and prostate and ascending, but it did not involve the kidney. In some of the other cases there was a general tubercular infection.

DR. TUTTLE said he has observed a number of cases of localized tubercular infection of the rectum, with enlarged lymphatic nodules, such as Dr. Alexander described as having found in the bladder. In other cases there are small miliary foci of lymphatic tissue grouped just beneath the mucous membrane of the rectum, which feel like small shot or millet-seeds, and are always associated with general tuberculosis, while the larger nodules of

lymphatic tissue, where there is only one which breaks down and ulcerates, indicates a local tubercular condition.

DR. JAMES BELL, of Montreal, inquired whether it is possible to absolutely exclude the influence of tuberculosis in these cases? The failure to find the bacilli can only be regarded as negative evidence.

DR. ALEXANDER said that in regard to the anatomical appearance of these nodules, it is absolutely out of the question to make a differential diagnosis between tubercular and non-tubercular inflammation of the bladder by simple inspection or by the microscope, in the very early stage. That is a well-recognized fact, and has been mentioned by Orth and others. The speaker said he held this point: that the formation of these nodules is a final process, and only goes on to ulceration or caseation when the tubercle bacilli find an entrance, which not infrequently occurs: that many cases of tubercular cystitis begin in this way, because we know how prone lymphoid collections are to take upon themselves a tubercular infection. He does not believe, however, that the two conditions are identical, and that all cases of nodular cystitis merely represent an early stage of tubercular inflammation, because we find the nodules so frequently in the normal bladder where there is no inflammation at all.

DR. GEORGE CHISMORE, of San Francisco, inquired as to the subsequent result in those cases of tubercular lesions which were curetted.

DR. ALEXANDER replied that the subsequent result was always bad. Only temporary relief was afforded by this method of treatment.

DR. BRYSON referred to the various forms assumed by tuberculous tissues. It does not always terminate in cheesy foci, and it is sometimes impossible to make a clear differentiation, even after operation.

DR. JOHN A. FORDYCE, of New York, said that when giant cells are absent, it is pretty conclusive evidence that the inflammation is not a tubercular one. Even without the tubercle bacilli, the giant cells are usually present in tuberculous growths, and we find them in very few other processes—exceptionally, in syphilis.

Report of a Case of Papilloma of the Bladder, with Specimens and Drawings.¹—By DR. JOHN P. BRYSON, of St. Louis.

DR. ALEXANDER said that in nodular cystitis a dense plexus of newly formed blood vessels is often found, similar in appearance to those in the angiomatous structure shown in Dr. Bryson's illustration.

DR. CHISMORE exhibited a litholapaxy aspirator, which he has employed with success in the removal of pedunculated bladder growths. The instrument is introduced into the bladder, and by means of suction the growth is drawn through the eye of the catheter into the reservoir. In one case of pedunculated polypi of the bladder the bulk of the mass was removed in this manner, and the hæmaturia, which had been a pronounced symptom, immediately ceased. In another case of malignant growth of the bladder in a woman, its removal by means of the aspirator also induced a temporary cessation of the hæmorrhage.

DR. BRYSON said that in the case narrated by him, the tumor must have remained absolutely symptomless for a long time before the man came under observation. This is perhaps accounted for by its situation, which was posterior to the left leg or limb of the trigone, behind the ureteral orifice.

¹ Will be published.

DR. ARTHUR T. CABOT, of Boston, said that Dr. Bryson's experience as regards the malignant character of these hæmorrhagic growths of the bladder coincided very closely with his own. All the cases that have come under his observation have been in old men, and with perhaps one exception (about which it is yet too early to speak positively), the tumors proved to be malignant. This fact has a very important bearing upon the treatment of these cases. The thorough removal of a malignant growth from the bladder, with curetting of the surface, entails quite a severe operation, particularly in an old man, and it is a question in many cases how much we gain by it. Oftimes, Dr. Cabot said, so little is gained by it that he has made it a rule never to operate in such a case unless the patient is in a very uncomfortable condition from the pain or hæmorrhage, with consequent tenesmus, etc. He also has noticed the fact, mentioned by Dr. Bryson, that many of these patients carry the tumor for long periods with apparent comfort. In one case, coming under his observation two years ago, the patient, a strong hale old man, had an attack of profuse hæmaturia. From the masses of epithelium contained in the urine it was assumed that he had a malignant growth. The man had no bladder symptoms, and the location of the growth could not be positively settled. Dr. Cabot said he refused to make even a cystoscopic examination, because he has so often seen such an examination in a previously untouched bladder lead to cystitis, and necessitate a subsequent operation for the relief of the discomforts produced. The patient went on for a year, bleeding considerably, but still able to continue his work. Then the picture changed. His urine became ammoniacal and he was obliged to pass it at frequent intervals. A cystoscopic examination was then undertaken, and on the left side of the bladder a large, cloudy mass was made out; it was very much obscured by blood and no definite diagnosis could be arrived at. Supra-pubic cystotomy was performed, and a tumor, resembling that shown by Dr. Bryson, was removed. The wound and the condition of the bladder improved, but the patient, who was seventy-five years old, gradually failed; he suffered from persistent hiccough, and died.

In regard to the use of the aspirating pump in these cases, Dr. Cabot said he has employed it for diagnostic purposes for years; he has never had Dr. Clismore's good fortune to remove enough of the growth by means of the pump to allay the hæmorrhage. In some cases he has been able to remove a considerable portion of the tumor in this way, and he regards it as a better means of making a diagnosis than is the cystoscope in some instances where the bleeding is severe.

DR. CABOT said that one case has come under his observation in which mental disturbance followed the removal of a bladder tumor, as occurred in Dr. Bryson's case. The patient was an old man from whose bladder a growth had been removed through a perineal incision, the bladder wall being afterwards curetted. In that case there had been a certain change in the man's mental attitude towards others for a year previously. Three weeks after the operation he developed delusions and had to be removed to an asylum. From these he never fully recovered.

DR. BELL said that one year ago last September he removed a papillomatous tumor from the bladder of a man aged sixty-nine years, and up to the present time the patient has had no signs of any recurrence. The growth was removed through a perineal incision; it was of the cauliflower type and

incrusted with phosphatic formations. About half a dozen stones were taken from the bladder at the same time, and it was only after their removal that the tumor was discovered.

Long Continued Bladder Drainage.—DR. PAUL THORNDIKE, of Boston, read a paper on this subject.

He stated that the employment of absolute rest has long been recognized as an essential in the treatment of most forms of inflammation which affect the genito-urinary organs, and especially the bladder, it being a comparatively common procedure to drain the latter organ for a few days either through the urethra or perineum in order to obtain for it as complete a rest as possible under certain conditions. The long continuance of such drainage is less often carried out.

There are unquestionably cases of prostatic and vesical disease of obstructive origin where the condition of the bladder demands drainage as a means of relief. In this way is provided rest from the bladder's irritable contractions, and also from the pain and discomfort which catheterization, frequently repeated for long periods of time, almost invariably induces. Such cases are common enough and the relief obtained by perfect drainage is prompt and efficient.

Drainage may be afforded through a catheter tied into the bladder and removed only to be cleaned, or through a perineal wound, with or without a drainage tube. In many cases the catheter drainage answers every purpose; in others, the perineal outlet is preferable, because the operation is rendered necessary for diagnostic or therapeutic purposes, aside from the question of drainage, or because the mental condition of the patient is such as to render it very difficult to keep a catheter of any sort in his urethra. The author stated as his belief that perineal drainage is a more effective way of keeping the bladder empty than draining through the urethra can be, and it should be the method chosen if the conditions are such as to warrant its use. That these methods of drainage may often be continued for a long time with the greatest advantage to the patient is unquestionably true, and that a permanent drainage of the bladder adds many years of comparative comfort to many lives is doubtless also true.

Dr. Thorndike then gave the histories of three cases coming under his care in which he practiced long-continued drainage with very good results. The first was a case of obstructive prostatic hypertrophy in which a soft rubber catheter was passed into the bladder through the urethra, tied there, and allowed to remain for three weeks. In the second case, also one of prostatic hypertrophy, the catheter was passed in through a perineal opening and kept there for two and one-half months. In the third case, one presenting prostatic and bladder symptoms of long standing, complete recovery followed thorough drainage through a perineal opening and continued for two months.

Long continued bladder drainage has also been employed with advantage in certain cases of suppurative pyelitis, where the inflammation is of tubercular origin, or due to an extension upwards of a purulent process, or to other causes, chief among which are the cases due to the presence of crystalline elements in the urine. The advisability of operating in the tubercular cases is doubtful; still, the field is large enough to make a consideration of this method of treatment a very interesting one.

In conclusion, Dr. Thorndike stated that long continued vesical drainage is undoubtedly of value in some cases; among these may be mentioned:

1. Some cases of vesical and prostatic disease where the operation is done to palliate symptoms, and where a radical operation is inadvisable or impossible.

2. Some cases of suppurative pyelitis, not of calculus origin. Most tubercular cases are probably outside the pale of this treatment. Here the drainage can be tried as a palliative measure before resorting to severer ones, such as a nephrotomy.

3. Some cases of obstinate urinary fistulæ.

4. Occasionally, in chronic urethritis.

5. Cases of chronic cystitis due to disease of the spinal cord.

DR. WILLIAM JUDKINS, of Cincinnati, said that Dr. Thorndike is certainly to be congratulated on the results he obtained. In one case that came under his observation four years ago, a man fifty odd years of age, the result of the treatment was by no means so favorable. The man was a bad subject and gave a history of tuberculosis. He was passing large quantities of urine. A soft catheter was tied into the urethra and allowed to remain there for a week. The man then went back home and died. In that case it was merely employed as a palliative measure; for the first three days he seemed to do very well; then he commenced to sink.

DR. CABOT said that an interesting feature in connection with the cases to which this method of treatment is applied is the increase in the specific gravity of the urine. It not infrequently rises from 1008 or 1010 to 1015 without any decrease in the quantity. He has only employed it as a tentative measure in those cases that are so severely troubled by frequency of urination that the question of operation is prominently brought up. Following the procedure there is often marked improvement in the patient's general condition.

With regard to the length of time the catheter may be worn, Dr. Cabot said that in one of his cases, an old paralytic who is confined to his bed, and who has in addition enlargement of the prostate, the catheter was first put in last November, and the man is still wearing it, on account of the comfort it affords him. One of the greatest advantages of this procedure is in the prevention of purulent pyelitis. In those prostatic cases where there is constant tenesmus, and frequent catheterization is necessary, there is great danger of the infection extending backwards to the kidneys, which are already partly diseased; the increase in the specific gravity of the urine, and the improvement in its quality is no doubt largely due to the fact that the back pressure on the kidneys is relieved by the removal of the obstruction below. The speaker said he has seen casts and other decided evidence in the urine of kidney trouble disappear after the removal of the bladder obstruction by means of thorough catheter drainage, and he regards this as a very useful therapeutic measure, which is not yet entirely understood, and which received a bad name at a period when these things were done in a much less cleanly way than we are doing them now, under antiseptic rules.

DR. BRANSFORD LEWIS, of St. Louis, inquired of Dr. Thorndike whether there was any leakage of urine in those cases in which the catheter is corked up and the patients are allowed to resume their work, and if not, how he provided against it?

DR. THORNDIKE replied that one of his patients had devised a little

apparatus, consisting of a plate of hard rubber, with two or three small holes in it for strings, and a larger hole for the passage of a soft rubber catheter. This plate is tied in place and works admirably; it causes no friction nor inconvenience, and by changing the size of the catheter from time to time, there is practically no trouble from leakage.

DR. EDWIN C. BURNETT, of St. Louis, said he has employed continuous drainage by the urethra in prostatic cases with very good results. He has also adopted this procedure in cases of stricture which have been dilated to a calibre sufficient to allow the passage of a No. 2 or 3 (English) catheter. During the intervals of urination the catheter is drawn forwards just far enough to prevent the escape of urine, and it is pushed inwards by the patient when he feels an inclination to urinate. Dr. Burnett said he has never had any unfavorable results follow this method of treatment, and by means of it he obviates all those injurious effects which sometimes follow the over-distention of a tight stricture—usually after the first forced dilatation. The catheter is retained in the urethra, and the urine is not allowed to flow over the strictured parts for twenty-four or thirty-six hours after the dilatation.

DR. CHISMORE said that in some cases the male urethra will resent the long continued retention of a catheter, while others are more tolerant. In one case coming under his observation the catheter was retained for three months, resulting in the permanent cure of a perineal fistula which he had been unable to close. In many instances he has seen relief follow drainage of the bladder through a perineal incision, particularly in cases which afterwards were again obliged to resort to the catheter; the relief was in the form of ease in catheterization and decreased tension. In adopting this procedure of long-continued drainage, no set rules can be given. The cases must be well selected. In those patients whose urethra resent the introduction of the catheter, its retention may lead to pyelitis, acute nephritis and death.

DR. BRYSON said that in tuberculous subjects he considered it an extremely dangerous procedure to open the deep urethra. In one case coming under his care, one of tubercular cystitis of the neck of the bladder he was solicited by the patient to perform a perineal urethrotomy, on account of an extremely irritating bladder. A perineal incision was made, and it has never closed: the entire wound became infected, it burrowed backwards and finally opened into the rectum, and the man has now a urethro rectal-peritoneal fistula. In another case where the entire prostate had been hollowed out by a tubercular ulceration, leaving a perfectly clean and smooth cavity which had burrowed backwards behind the vesical outlet and opened into the rectum so that the feces were passing through the urethra, Dr. Bryson said he opened the perineum for the simple purpose of giving relief to the pocket that existed there. That wound also became infected and underwent cheesy necrosis.

In cases of non-tubercular pyelitis, the speaker said he thought we could not resort to drainage too quickly. Either by the urethra or the perineum drainage should at once be resorted to to relieve an intractable cystitis. Before introducing the tube, the urethra should be rendered thoroughly aseptic. It can be washed out by means of Ultzmann's deep urethral syringe, using either Thiersch's solution, or a solution, of carbolic acid, or a two per cent. thallin solution. The rubber catheter should be boiled for half an hour, thus rendering it less friable and preventing incrustations. In

one case, the speaker said, he has kept up perineal drainage for three months.

Exhibition of a Genital Dressing Retainer.

DR. BRANSFORD LEWIS, of St. Louis, exhibited an apparatus which he has devised for the purpose of retaining genital dressings in gonorrhœa, etc. The apparatus is in the form of a T-bandage; it consists of a belt, which is passed around the body just above the hips, and a piece of cheese-cloth, attached to the belt in the rear and passed between the thighs, diaper fashion. By means of this retentive apparatus the genital dressings are readily kept in place, and rest is afforded to the inflamed urethra.

A Case of Multiple Chancre.

DR. R. W. TAYLOR, of New York, showed an illustration of a case of multiple chancre. The patient has a large chancre over the dorsum of the penis, with two smaller ones below it and a well-defined chancre of the lip. The syphilitic symptoms in this patient were of a very malignant type. Another unusual factor in connection with it was the development of a phlebitis in the form of goose-quill like cord running up the penis and terminating near the abdomino-scrotal angle in a mass as large as a man's finger. The ganglia on each side could be distinctly felt, and as the disease retrograded under treatment, the infiltration disappeared, leaving the enlarged ganglia underneath.

DR. TAYLOR said that the observations of Küleff and Van Giesen, as well as his own, have shown very conclusively that the old idea of the enlargement of the lymphatic cord in syphilis needs much modification. Those goose-quill like cords which we sometimes find running up the penis are really enlarged or infiltrated veins, and it is safe to say that the so-called lymphangitis is really a phlebitis.

DR. TAYLOR also exhibited some soft gelatine capsules containing mercurial ointment. They are manufactured by Messrs. Fraser & Co., of New York, and are made in two sizes, containing, respectively, 30 and 60 grains of the ointment.

On the Treatment of Cancer of the Prostate by Suprapubic Section with Parenchymatous Injections of Pyoktanin Blue.¹—By DR. JOHN P. BRYSON, of St. Louis.

Abscess of the Space of Retzius.²—By DR. PAUL THORNDIKE, of Boston, Mass.

DR. CABOT said he has noticed in a number of cases of ruptured bladder, caused by fracture of the pubic bones, where the rupture usually occurs just above the prostate, that the extension of the swelling upwards is very often limited by this space of Retzius, as we would expect it to be, anatomically. Another interesting anatomical point, which he happened to notice, while performing his first supra-pubic operation, was the situation of the fascia propria of Valpeau. This fascia held down the peritoneum, so that the bowels could be made out with each respiration, leaving no space below in which to enter the bladder. The moment that this fascia was divided, the peritoneum was drawn up out of the way and gave no further trouble.

¹ Will be published in this Journal.

² Will appear in this Journal.

DR. LEWIS gave the history of a patient who had a number of strictures situated in the bulbous portion of the urethra, complicated by rupture of the urethra, with extravasation of urine and peri-urethral abscess. A perineal section was made to relieve the septic symptoms, and permanent drainage established through the perineal opening. After a few days a swelling was noticed in the supra-pubic region. This proved to be an abscess in the pre-vesical space, due to an extension upwards of the inflammatory process. This was opened and more than one pint of pus evacuated. The inflammation had also extended to the bladder, and one week after the pre-vesical abscess had been opened the incision was extended down through the bladder-wall, thus completing the supra-pubic cystotomy. Thorough drainage was then established by passing a tube from the supra-pubic through the perineal opening. From that time on the patient continued to improve and he is now entirely well.

DR. BRYSON said he has seen several cases in which suppuration occurred in the space of Retzius following supra-pubic cystotomy. This probably occurs oftener than we think, and gradually heals in the course of time, especially if the urine be kept aseptic. The anatomical point referred to by Dr. Cabot is a very interesting one. The speaker said he has often been puzzled to know what structure it was that slipped over the bladder-wall after the peritoneum had been put well out of the way. He has frequently noticed this shining thin membrane, which he presumes is the fascia propria to which Dr. Cabot referred. Dr. Bryson said that in a number of instances he has experienced much difficulty in getting the supra pubic wound to heal. In those cases where a chronic inflammatory condition exists the bladder wall should be cleared off and the incision made high up. For the past three or four years he has been in the habit of making his incisions through the bladder-wall as high up as possible. The quicker the bladder end of the wound heals, the less danger there is of a permanent fistula.

DR. ALEXANDER said he has not noticed the fascia mentioned by Dr. Cabot. He has never had any trouble in getting plenty of space in which to open the bladder-wall. The speaker said he has never had an abscess of the pre-vesical space following supra-pubic cystotomy which he thought was due to the fact that he does not insert his finger into this space. In performing the operation he makes a transverse incision, carries the peritoneum upwards and opens the bladder as high up as possible.

An Odd Method of Syphilitic Inoculation.¹—By DR. WILLIAM JUDKINS, of Cincinnati.

DR. TAYLOR said that these unusual methods of syphilitic inoculation are not so very uncommon. Two cases of chancre of the head have come under his observation in which the sore was acquired by the patients' scratching a mosquito bite after having fondled a syphilitic woman. Another case has been reported in which the man became infected from the barber's shears while having his hair cut.

Affections of the Testicles and their Appendages in Hereditary Syphilis.—DR. R. W. TAYLOR, of New York, read a paper on this subject.

He stated that although it was formerly held by Zeissl, Hill and others

¹ Will be published.

that the testicles are not affected in hereditary syphilis, there is to-day so much evidence from many careful observers that syphilis does attack these organs in hereditarily infected children, that it is almost unnecessary to mention this old-time contention. The most common affection is orchitis, and while inflammation of the epididymis is sometimes observed it is almost always as a complication of orchitis. Involvement of the vas deferens is quite uncommon, but occurs as a complication of the orchid-epididymitis. Neither of these affections is really of frequent occurrence, as shown by the fact that in literature something like fifty cases are more or less fully described or alluded to. Testicular affections are among the rarer manifestations of hereditary syphilis. Pathologically, the testicular lesion has been recognized by Hutinel as early as the ninth and twenty-third days of birth. Clinically, however, it is seen generally in children from three to six and twelve months old, and in diminishing frequency in the second or third years. Somewhat exceptionally it is seen in later years. The author stated that his experience goes to show that these lesions occur in children the offspring of one or both parents in a tolerably active condition of syphilis, and in many of the reported cases the conditions are similar.

The clinical history of the affection is as follows: The orchitis begins slowly and insiduously. No pain is felt by the child and attention is not called to the diseased organ until its dimensions have become so marked as to attract the notice of the mother or nurse. As usually seen in practice, the testis is of the size of a pigeon's egg, of a small marble, of a shelled filbert, of an olive or even of a walnut, and is commonly of an ovoid shape. As a rule, the organ is not large; in other words, there is no tendency to the development of conspicuously large tumors. To the touch, the swelled testis is hard and firm (less hard and ligneous than in the adult) indolent, painless and decidedly heavy. It can usually be handled with impunity. In some cases there is concomitant hyperemia of the scrotum. In rather rare instances the surface of the tunica albuginea is irregular and gives the sensation as if small shot or split peas were seated in its superficies. The epididymis may be slightly or considerably enlarged, in part or in whole. The swelling is smooth and firm and pressure upon it sometimes causes pain. The enlargement of the vas is similar in all respects to that of the epididymis.

These affections, uninfluenced by treatment, usually run an uneventful course and may end in resolution or in atrophy, particularly of the gland substance. As a general rule, it may be stated that atrophy is the chief form of degeneration in this form of orchitis. In somewhat rare instances, fungus of the testes is observed, and it follows the same chronic rebellious course that it does in the adult. Abscess and necrosis of the testes also occur, in which case we observe a sinus in the scrotum (which may be much inflamed) which leads down to a pus cavity of varying size in the gland itself. If treated early and vigorously, resolution may be brought about and a testis, more or less damaged, may be left. It is always well to try energetic local and general treatment before thinking of ablation. Hydrocele is a more frequent complication than has heretofore been conceded. It may be slight or well marked. The concomitants of these testicular affections vary according to the age of the child and the intensity of the infection. In very early months, roseola, papular syphilides, mucous patches, eye, ear and bone lesions may also be present. In later months there will be fewer

and perhaps no concomitants. Deschamps and Hutinel lay stress on the fact that in syphilis the testes are usually both involved, while in tuberculosis commonly but one is affected. This, however, cannot be accepted as a general rule, as we not infrequently find that the syphilitic affection is unilateral. In syphilis, the epididymis and vas are moderately involved, while in tuberculosis it is common to find these appendages much enlarged and sometimes nodulated. In all cases it is absolutely necessary to examine the prostate and seminal vesicles by rectal touch, and if they also are found to be swollen, the presumption will be warranted that the case is one of tuberculosis. On the other hand, freedom of these structures from disease points in a measure to the existence of syphilis. Cases have been reported in which the syphilitic history is clear and the testicular symptoms point to that origin, yet intelligent and active anti-syphilitic treatment fails to produce resolution. In these cases we observe what is so frequently seen in adults, namely, a tubercular infection in a syphilitic subject.

DR. TAYLOR then gave the histories of a number of cases of hereditary syphilis in which the testicles and their appendages were involved. The mixed treatment, in goodly and increasing doses, was found most efficient in these testicular lesions, as it is in the bone and joint lesions of hereditary syphilis. This treatment, with intermissions, should be kept up at least two or three years. Locally, much good can be derived from mercurial frictions to the scrotum, using (with great care so as to avoid a dermatitis) white precipitate or blue ointment. When the organ is much destroyed by degenerative processes, ablation may be necessary.

DR. TUTTLE said that in one case of hereditary syphilis coming under his observation, he noticed the involvement of the testis between the third and fourth week of the child's life.

DR. BRYSON said that in tubercular lesions of the testes, especially in children, they are made worse by the administration of the iodides, whereas the syphilitic lesions are markedly improved.

DR. TAYLOR, in answer to a question, said that both testicles become involved in about 33 per cent. of the cases. The lesion may occur as early as birth, but it is rarely noticed by the parents until the child is several months old.

Exhibition of Photo-Micrographs, Illustrating Some Pathological Conditions of the Genito-Urinary Organs. By DR. JOHN A. FORDYCE, of New York.

The speaker showed a number of photo-micrographs illustrating various pathological conditions of the genito-urinary organs, among which was a section of the kidney showing fatty degeneration of the epithelium of the tubules produced by phosphorus poisoning. Another from a patient with argyria showed the blood vessels of the glomeruli stained black by the silver salt. These sections illustrated the selective action of drugs on the different anatomical tissues of the organ.

Other photographs from a case of sclerosis *en plaques* of the bladder and ureters demonstrated the histological appearance of the lesions.

Photographs were also exhibited of concretions in the prostate, anthrax bacilli in the kidney, syphilitic endarteritis of the kidney and placenta, hyaline degeneration of the glomeruli from a case of syphilitic nephritis, giant-celled sarcoma of the testicle, etc.

DR. FORDYCE, in reply to a question regarding the changes in the kidneys produced by syphilis, said he had in his possession many sections of kidneys in a state of chronic nephritis, without any suspicion of specific disease, and they showed much the same appearances.

He said that it is a question whether early syphilis produces any characteristic form of kidney disease. The form of nephritis shown by these sections occurs in early syphilis, where the poisonous elements are diffused throughout the blood. In old syphilitics you get an amyloid degeneration or a gummatous nephritis.

A Case of Calculous Pyelitis with Complete Suppression of Urine for Seven Days. Relieved by Operation. By DR. ARTHUR T. CABOT, of Boston.

The patient was a man aged 60 years. He was first seen in December, 1892. He gave a history of rheumatism. Seven years ago he had an attack of renal colic in the left kidney, followed by the passage of two stones. He was then well until two years ago, when he had an attack of pain on the right side and passed a stone which was larger than the previous ones. The pain during this attack was thought to be due to rheumatism and was not so severe as is usual in renal colic, so that its origin was not suspected until the stone was passed. He was then free from trouble until November, 1892. Early in that month he had twinges of pain in the right side which were thought to be due to rheumatism. These passed off. He had a similar pain in the left side on the 19th of November. From this he again recovered and on December 5th he went to his business but was seized while there with such an acute pain in the back that he was compelled to return home. This attack threw him into a severe perspiration; the pain was distinctly referred to the left side. On the following day it was noticed that he was not passing any urine. This anuria continued for three days, when a catheter was passed, but only one dram of turbid urine was obtained. From that time up to the evening of December 12th, when he came under Dr. Cabot's observation, no urine was passed. The patient was quiet and did not at all look like a sick man. There was no nausea, no headache, no drowsiness; in fact he said he felt perfectly well. An examination was made, but nothing could be detected, either in the abdominal or lumbar region. There was no tenderness anywhere, even on considerable pressure. He was advised to drink plenty of water; a mustard poultice was placed over the kidneys, and sugar of milk was administered freely throughout the night. On the following day there was no pain; he had passed no urine. His tongue was very dry and he had no pain excepting that occasioned by a little flatulence. Pulse 76, of fair strength; no nausea. He was again examined and some resistance was felt in the right renal region. A rectal examination showed a prostate of moderate size, but nothing in the region of the ureter. It appeared that the functions of the kidneys had been interfered with by some mechanical obstruction, probably a stone, and an operation was advised for its removal. In view of the total suppression of urine accompanying the attack of pain in the left side it was thought probable that the right kidney had previously been rendered useless either by destruction of its secreting apparatus or by blocking of its ureter, and that now a calculus had shut off the secretion of the remaining kidney. It was designed to open the abdomen by median incision to examine both kidneys and their ureters, and

then to proceed in the best way possible to the correction of whatever condition was found. This plan was agreed to and the operation was performed on December 14th, between seven and eight days after the establishment of complete anuria. On the morning of the operation the patient began to show evidences of constitutional disturbance. The pulse and temperature had risen decidedly, and there was commencing mental hebetude.

The operation was done under æther. The hand was introduced into the abdomen through a median incision between the umbilicus and the pubes. The right kidney was felt to be enlarged to perhaps three times the normal size; its surface was irregular and divided into large lobes. Careful palpation of the ureter was difficult on account of the abundance of fat in the post-peritoneal tissues, but no hardness suggesting a stone could be felt anywhere in that pelvis or ureter. The left kidney was of normal size and its pelvis was not distended with fluid. The ureter on this side was followed down with great care from the kidney to the bladder, but nothing like a stone could be detected. The condition of things thus far confirmed the previous opinion that the right kidney had been previously disabled, and strengthened the belief that the stone which caused the final suppression was blocking the left kidney. With the object of more carefully palpating the region, which was deeply buried in fat, an oblique incision was made in the left loin and that kidney uncovered. With one hand in the abdominal and the other in the wound in the loin, very careful search of the pelvis of the kidney and of the upper part of the ureter was possible, but the result was negative.

The operation was now abandoned and the abdomen closed, the wound in the loin being drained and partly closed. The patient recovered from the æther, and about three hours later there was a slight escape of urine through the urethra, and on passing the catheter thirty-seven ounces of light-colored urine were drawn off. This flow continued, so that partly by natural efforts and partly by the catheter two gallons of urine were obtained in the first twenty-four hours. In the second twenty-four hours the amount fell to about five quarts, and after that there was a steady, gradual decrease until the daily amount had reached the neighborhood of seventy ounces, to which it held. Convalescence was satisfactory and about a fortnight after the operation the bladder was washed out with a litholapaxy pump, obtaining a few grains of calcareous matter, thus completing the evidence that the ureter had been stopped by a calculus which had been displaced by manipulation during the operation. The fact that the pelvis of the left kidney was not distended with urine seems to show that the function of this organ was stopped by an inhibitory action, due to the irritation of the calculus in that ureter, and was not due wholly to the obstruction to the flow of urine and to the back-pressure exercised by this obstruction. This cessation of the secretion of urine in this kidney should explain the short duration of the pain when this ureter was blocked. Had the urine continued to be excreted, the internal pressure in the kidney would probably have caused a longer duration of pain, and it would have been much more severe in character.

Not long after the patient had gone home from the hospital he had another attack of discomfort in the left side of the abdomen, accompanied by chills and high temperature. This persisted for many hours. He was passing an abundant quantity of urine. Careful examination detected

nothing abnormal in the lower part of the abdomen where the pain was located. Remembering the experience of the previous attack, Dr. Cabot said he made considerable massage through the abdominal wall down along the course of the ureter and as deeply into the pelvis as could be reached. After this the man was comparatively comfortable and had no more serious pain. A week or two later a stone was passed that was decidedly larger than the bits of calculus that were obtained by the pump after the operation.

The conclusions which the author drew from the experience gained in this case, and from a study of the literature on the subject are the following:

1. That in a calculous patient, or in a patient with a distinct attack of renal colic, the suppression of urine should be regarded as directly due to the stone, and that in the majority of cases both kidneys will be found to be disabled, for the cessation of the functions of a healthy kidney due to irritation of a stone in the opposite ureter must be very rare.

2. These cases should be treated by operation as soon as it has been found that the function of the kidney has come to a stand-still, as there is little chance of a stone being pushed along the ureter when the kidney is no longer excreting urine behind it.

3. In the absence of any evidence as to the location of the calculus, the first step in such an operation should be a median laparotomy, with the hope of discovering the whereabouts of the stone in order to proceed intelligently for its removal.

4. If, by this examination, no calculus can be found, so that further operative procedure cannot be decided upon, massage of the pelves of the kidneys and of the ureters from above downwards should be practiced in the hope of dislodging or breaking up a small calculus, if such exists.

(To be Continued.)

THE NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY,

DR. SAMUEL ALEXANDER, *President, in the Chair.*

A Case of Syphilitic Re-infection.—By DR. G. K. SWINBURNE.

The history of the case is as follows: Male; aged 25 years. Had a chancre in April, 1889; period of incubation, eighteen days. The inguinal glands were enlarged, followed six weeks later by a general roseolar eruption. The patient was given mercury by the mouth for one year, during which period he had no further syphilitic manifestations. Treatment was resumed for a short time a few months later on account of a sore mouth—probably a mucous patch.

The patient was first seen by Dr. Swinburne in June, 1891. An examination revealed a faint cicatrix on the prepuce, half an inch back of the glans. No glandular enlargements could be felt. There were evidences of a faded roseolar eruption on the chest, back and abdomen. On the floor of the mouth there was a small ulcer, which healed under nitrate of silver, but repeatedly returned, always in the same place. The patient had two attacks of herpes preputialis, which healed without treatment. From March,

1892, to September, 1892, the patient was placed on mixed treatment. Under this, the ulcer in the mouth disappeared.

On December 23, 1892, the patient returned with the following history: Following a suspicious connection thirty-three days before, a sore appeared on the prepuce, just behind the glans. Examination revealed a broken down vesicle, like that of a herpes. No glandular enlargements could be felt. Ten days later the sore had developed into a typical looking chancre. There was marked induration, with a punched out ulcer in the center, discharging a thin pus. The inguinal glands were distinctly enlarged, round and painless. On the thirteenth day, at the earnest request of the patient, he was put on mercurial treatment. On the twentieth day the induration in the chancre remained unchanged; the ulcer, however, had healed over. The epitrochlear glands were markedly enlarged. These glands had not been found enlarged at any previous examination, although repeatedly searched for. On the thirty-seventh day the induration in the chancre had subsided; the glands remained as before. At the end of the eighth week only the cicatrix of the chancre was left. The inguinal glands have subsided somewhat: the left epitrochlear gland is still distinctly felt; that on the right side can only just be made out. Up to the present date no eruption has appeared. The patient has been kept under specific treatment.

In conclusion, Dr. Swinburne said that he did not wish to go on record as positively stating that this was a case of syphilitic re-infection; he regards it as an interesting case because it involves the possibility of being one of re-infection.

DR. R. W. TAYLOR opened the discussion. He said that the subject of re-infection, with constitutional syphilis, is an interesting one. About eighty such cases have been reported. Of these, five have come under his personal observation. Most of these eighty cases were reported by German, Italian and American observers. The French, under Fournier, deny that there is such a thing as re-infection, with constitutional syphilis. They claim that Ricord's law, formulated about 1836, that a chancre occurs but once in the same person is still valid. Dr. Taylor said that, in his opinion, many of the cases of re-infection thus far reported are apocryphal—probably fifty per cent.—and would fail to bear the light of close scrutiny. The speaker said that the case reported by Dr. Swinburne is an interesting one, but he should hesitate very much to accept it as a genuine case of syphilitic re-infection. The man had received but one year's treatment, which was restricted to the use of mercurial pills. The efficacy of the treatment of syphilis solely by means of mercurial pills is rather doubtful, unless it is in a patient in whose tissues the disease takes a very light hold. Relapsing indurations, which are so often regarded as secondary infections, are not infrequent. They may appear as small mucous or sub-mucous neoplasms, occurring upon the site of the previous chancre, or in its neighborhood. Occasionally such growths occur a considerable distance from the original lesion. They may appear as superficial papules or as a subcutaneous tubercle. Again, following a little irritation, there will be an excoriation of the skin, and this refuses to heal and becomes indurated. Then again, you may have such an induration develop upon the site of a herpetic ulcer, giving rise to localized or diffused hardness. Ganglionic enlargement in late syphilis is rare, but in those cases where energetic treatment has not been persisted in for two or three years, late glandular enlargement may occur

That syphilitic re-infection does occur is certain, but it happens very rarely, and the subject is so important that upon every case that is brought up we should turn the calcium light of scrutiny and broad experience, and subject it to the closest investigation. Dr. Taylor said that some authorities claim that in cases of syphilitic re-infection the course of the disease is mild. In the five cases he has had the second course of the disease was very severe indeed.

DR. H. G. KLOTZ said he did not believe that Dr. Swinburne's case was one of syphilitic re-infection, and if it was, the author of the paper certainly did not prove it. To prove that it is a case of re-infection, it is absolutely necessary to have the secondary eruption make its appearance at the statutory time following the appearance of the initial lesion. The possibility of proving Dr. Swinburne's case has been taken away by the man's having been put on specific treatment. Enlargement of the epitrochlear glands is a symptom which we should not expect to get within the first month.

DR. C. W. ALLEN said he thoroughly believes in syphilitic re-infection, although he has never been fortunate enough to see such a case. He has, however, a number of times seen patients who appeared to be suffering from such re-infection, but the facts would not bear close scrutiny. It is important, before positively placing such a case on record, to have our data firmly established. The course of the disease, on both occasions, should either have been observed personally, or we must have undoubted evidence of its existence.

DR. G. E. BREWER said he has never seen a case of syphilitic re-infection. He has quite often observed lesions representing typical chancres occurring at or near the site of the original chancre; these he regarded as gumma springing from the old cicatrix. Such a case very recently came under his observation.

DR. W. K. OTIS said he considered the term relapsing chancre a misnomer, because the new growths do not always occur on the site of the original lesion. Such cases are often very puzzling to the physician. He has seen one case which at the time he regarded as due to re-infection. The man had undergone a thorough course of treatment, lasting three years, for undoubted syphilis. Some time after treatment had been suspended he appeared and presented a sore on the penis, which was remarkably indurated, and had all the characteristics of a typical chancre. Thirty days before its appearance, the man had had a suspicious connection. The glands in the groin became enlarged. No treatment was instituted and the man showed no further signs of syphilis. He married within eighteen months after the appearance of the second sore, and since then he has had a perfectly healthy child. In conclusion, Dr. Otis said he thought we were very apt to mistake the indurations that occur during the tertiary stage of syphilis for a fresh initial lesion.

DR. H. GOLDENBERG said he thought that if Dr. Swinburne's case was a genuine one of re-infection, the man would probably develop some secondary symptoms, in spite of the treatment that had been instituted.

DR. L. BOLTON BANGS said he has always had and still maintains a certain amount of scepticism as regards syphilitic re-infection. Still, when we review the cases that have been reported by competent observers, who have followed the typical symptoms of syphilis through both courses of the disease, we are bound to believe that there is such a thing as syphilitic re-in-

fection. From a pathological standpoint, Dr. Bangs said, he saw no reason why we should not see cases of re-infection of this disease, just as we occasionally see with small-pox or other infectious diseases. The interval between the original chancre and the supposed re-infection, the speaker said, was rather brief in the case reported by Dr. Swinburne. Too much reliance should not be placed upon the enlargement of the epitrochlear glands in making the diagnosis, especially as in this case they became enlarged at such an early date after the appearance of the second lesion.

DR. F. TILDEN BROWN said he has had no personal experience with this form of syphilis. In order to prove a case of re-infection, it seems absolutely necessary that all the symptoms should be unmistakable, but we must bear in mind that ordinary cases of syphilis sometimes pursue an anomalous course, and this no doubt applies also to cases of re-infection. The first course of the disease may be mild, and the second course very severe and well developed, or vice versa.

DR. SAMUEL ALEXANDER said that although he has never seen a case of syphilitic re-infection, he believes in its existence. A number of times he had such a case to deal with, but further observation cleared up the diagnosis.

DR. TAYLOR, in reply to a question, said that the relapsing indurations may develop as papules in the mucous membrane; they may become superficially excoriated or ulcerate, and present a cup-shaped appearance, or we may have crater-like formations resembling gumma. All of them are the result of small-celled infiltration, such as we have all through syphilis. They may be in the form of plates, feeling like disks of cartilage, generally situated in the subcutaneous connective tissues of the prepuce.

The discussion was then closed by Dr. Swinburne.

Cases of Urethritis.—By DR. G. E. BREWER.

The object of his paper, Dr. Brewer said, was to briefly report three cases of acute, non-specific urethritis, resembling gonorrhœa in symptoms, severity and duration, regarding the origin of which he had no rational explanation to offer.

Case I. In the Spring of 1887 a young man, very melancholy and dejected in appearance, applied for treatment at the genito-urinary room, at the Roosevelt Dispensary, stating, in substance, and with every evidence of the most poignant grief, that he had been overtaken by a just retribution, and was now suffering from a "terrible disease." He further stated that he had been morally sure from the beginning that sooner or later the disease would surely appear, and that morning he had discovered a drop of pus at his meatus. Upon examination he was found to have the characteristic signs and symptoms of a beginning urethritis. The patient stated that he had, up to the present time, never suffered from venereal disease, and that his first, last and only exposure had occurred thirty-one days before; of this date he was positive, as it occurred on the evening of a holiday, and his minute description of the circumstances leading to his "fall" left no reason to doubt the correctness of his memory on this point. No gonococci were found in the secretions. The case continued without complications for several weeks, and was finally lost sight of.

Case II. Male; aged 24 years; private patient. He first came under observation about four months ago, seeking relief from a slight urethral dis-

charge, which he said resulted from an acute urethritis from which he had suffered two years before. The history which he gave of his attack at that time was that after a period of intense erotic excitement, lasting several hours, and without sexual contact, he had noticed a transparent mucous discharge from the meatus which gradually increased in amount, became more opaque, whitish and finally yellow in color, and was accompanied by redness of the glans, swelling of the prepuce, ardor urinæ and chordee. The duration of the acute stage was about four weeks; the symptoms then slowly improved, until nothing remained but a slight gleet. In the secretions which the patient presented when he first came under Dr. Brewer's observation, no gonococci were found.

Case III. Male; age 37 years; first came under observation in October, 1892. This patient had been married fifteen years, and had never, during his entire life, indulged in sexual intercourse. The reason he gave for this remarkable continence was that his wife was a confirmed neurasthenic, having fixed ideas amounting to almost positive delusions regarding the sexual act, and he, fearing to offend her, had allowed this state of affairs to continue year after year, until the condition of his wife's nervous disorder became so aggravated that she sought the advice of a neurologist, who advised the establishment, if possible, of healthy sexual relations between the two, with the hope that a possible pregnancy might divert the wife's thoughts from their abnormal channels. About two weeks after the receipt of this advice, Dr. Brewer said, the husband called upon him suffering from an acute purulent urethritis, accompanied by redness, œdema, ardor urinæ and chordee. He positively denied any outside source of infection, and stated that on two occasions, eight and fourteen days prior to the occurrence of the initial symptoms, he had attempted coitus with his wife, but without success, owing in part to her excessive local sensitiveness and nervous excitement. Examination of the pus showed no gonococci. Subsequent examination of the wife demonstrated nothing abnormal, save a very small vaginal orifice and a moderate amount of vaginismus. Under appropriate treatment this patient recovered. Another attempt at coitus was followed by a relapse, from which he has also recovered. In conclusion, Dr. Brewer said that in reporting these cases, he has purposely omitted all details which did not directly bear upon their etiology.

DR. BANGS, in opening the discussion, said that Dr. Brewer's paper opened a very broad subject before us. We must take it for granted that the Doctor's examination of the patients brought out the whole truth. The statement made by the last patient—the married man who had lived a life of continence for fifteen years—certainly implies a good deal; it not only implies a great deal of self-control on the man's part, but also a great lack of temptation. It also suggests another possible condition. We all know that long-continued, unsatisfied erotic excitement produces a tissue change in the posterior urethra, especially in the bulbous and prostatic areas, which eventually becomes a true inflammation. In such a case it may not be necessary to have as the exciting cause the gonococci themselves.

DR. W. K. ORIS said he thought the discharge in the cases narrated by Dr. Brewer was of microbic origin. It was not necessarily due to the presence of gonococci. About a year ago such a case came under his observation. The patient was a married man, who had never had gonorrhœa. Two days after his first connection with his wife (without having had connection

with any one for a month previous to that) he began to suffer with an acute urethritis. The discharge, which was profuse, contained no gonococci. Within a week after its onset it suddenly ceased. In such cases, Dr. Otis said, there is probably a certain amount of stricture. He is of the opinion that stricture often exists without there being any previous history to account for it. He has seen stricture in children where there was no history of gonorrhœa or anything else to account for its presence. These inflammations of the urethra are not so severe as those of gonorrhœal origin.

DR. TAYLOR said that while in a broad sense the theory that virulent gonorrhœa is due to the presence of gonococci is well proven, it is by no means proven that all cases of urethritis are due to the gonococci. A number of French and German observers have shown that certain micro-organisms exist in the normal urethra, and it is fair to assume that these can be fanned into activity in a hyperæmic state of the tissues. The ordinary streptococcus or staphylococcus, or some other form of micro-organism, is, no doubt, at the bottom of these cases of urethritis, where no history of gonorrhœal infection can be obtained. In conclusion, Dr. Taylor said that we are only on the threshold of our knowledge regarding the etiology of urethral inflammation.

DR. SWINBURNE said he has had under his observation two cases, both young men, who suffered from profuse urethral discharge and denied all sexual intercourse. Both confessed to having practiced masturbation.

DR. GOLDENBERG said he has seen a number of cases of urethral discharge due to irritation, the latter being produced by frequent erections.

DR. BREWER, in closing the discussion, said that he does not believe in the theory of an idiopathic urethritis. The interesting point about the cases presented was that there was a lack of sexual contact. In connection with cases like these, one must always bear in mind the possibility that the statements made by the patients are untrue.

Urethral Chancre.—DR. F. TILDEN BROWN presented such a case. The patient, thirty-eight days after his last exposure, noticed that his inguinal glands on both sides were enlarged. Palpation of the urethra revealed a point of induration; this was too deeply situated to be seen by turning out the meatus excepting by artificial means. An interesting point in connection with the case is that, on examining the chancre, scarcely any lesion is to be seen; there is only a slight erosion. The meatus is œdematous and exudes a viscid, whitish fluid. The induration was very distinct.

DR. BROWN also presented a patient upon whom he had performed internal urethrotomy for the relief of a tight urethral stricture at five inches. Before cutting the stricture, a number of whalebone filiform guides had been passed through it, and in withdrawing these it was seen that three of them were bound together by a small whitish ring—probably composed of cornified epithelium that had formed the crest of the stricture. It surrounded the filiform guides like a small rubber band. Dr. Brown also presented two pathological specimens—one, a urethra dissected out and laid open, showing a tight stricture in its deeper portion; the other, a tubercular testis and epididymis, removed from a man 32 years old. The testis contained a number of cavities filled with pus. Tubercle bacilli had been found in the man's urine.

DR. TAYLOR referred to the encrusted form of chancre that is found in

the urethra, sometimes resembling a small layer of ivory or cartilage. No visible change in the appearance of the mucous membrane may be associated with such a lesion. When the infiltration is superficial, these cases are often very puzzling to make out. Dr. Taylor said he has seen one case in which the chancre in the urethra was as far down as four inches.

Selections.

Physiological Albuminuria. BÉCHAMP (*Archives Générales de Médecine*, p. 96, Jan. 1893.)

Béchamp concludes from his investigations on physiological albuminuria that human urine in the state of health, contains always a soluble ferment which he calls nephrozymase, and that it is this which constitutes one of the albumins found in the urine under normal conditions. It varies in amount with age, sex, temperament, moment of emission, repose, work and alimentation. The ferment does not exist in the blood; it is produced by the kidney, which proves that the kidney is not a simple filter but that it possesses a peculiar function, dependent on the function of nutrition.

The nephrozymase may completely disappear in the urine of nephritis as in other affections, and may increase or diminish in certain pathological states without there being any albuminuria, properly speaking. The albumins of albuminuria are not produced in the kidney; the anatomical alteration of the kidney follows the vice of nutrition of the gland.

JOHN-TON.

The Regimen in Diabetes. ÉTIENNE (*Archiv. Gen. de Méd.*, Feb. 1893.)

Innumerable experiences have shown that there are two facts which should govern all alimentation in diabetes.

1. To diminish the use of substances which are transformed into sugar in the organism.

2. To escape the lowering of vitality of the system necessarily produced by suppression of food-stuffs which almost all occupy an important place in ordinary alimentation.

Rye and wheat bread are to be replaced by some of the many unsatisfactory substitutes offered for them. Almond, gluten and other preparations from the seeds of vegetables or cereals have all their drawbacks. One of the best, Létienne declares, seems to be "aleurone" (vegetable albumin). It has an agreeable taste and is easily assimilated. It contains 80 per cent. of albumin and 7 per cent. of carbohydrates.

Farinaceous vegetables are forbidden, especially the potato, peas and lentils. The green vegetables, salads, cresses, celery, salsify and asparagus are permitted by the majority without restriction, while fruits are universally interdicted on all sides.

An exclusively flesh diet is in great favor with many practitioners, but it has the great inconvenience of causing loss of fat and strength, sometimes bringing on a sort of intoxication. Eggs, fresh butter, oils (olive and vegetable) supplement the flesh regimen nicely. Milk is not generally employed except as accessory to other forms of food.

The substitutes for sugar, glycerine and saccharin, as the substitutes for

bread, have been weighed and found wanting. The simplest practice is now to reduce the amount used gradually.

The drink, *par excellence*, is water as pure as possible. White wine is recommended and the malt extracts have many warm partisans. The carbonated waters, Vichy, Seltzer, Royat, are often useful.

Dietetic regimen is not all in the treatment of diabetes, and it is necessary to employ other hygienic prescriptions. Brain work must be regulated. Excess is very prejudicial to the best results. In moderation and adapted to the individual muscular labor is most beneficial. A sojourn in a warm and equable climate, freedom from care and distractions exert beneficial influence. Hygienic care of the skin ought to be insisted on, with diabetics. Salt baths, dry friction are excellent practices, but every means calculated to provoke a sweat are to be avoided, since death even has followed a prolonged vapor bath.

JOHNSTON.

Syphilitic Spinal Paralysis.—Erb (*Neurolog. Centralbl. No. 6. 1892*) maintains that the spinal manifestations in subjects of syphilis, possess sufficiently marked features to make a special morbid entity, though having much resemblance to the spastic paralysis so far as the various movements of the legs are concerned, and the exaggeration of the tendon reflexes. Muscular spasms are, however, relatively little marked while bladder function is almost always affected.

The symptoms are of slow development and progress and even years may pass before they are all present. They consist in paresthesia, transient pains, fatigue easily brought on, stiffness and weakness of the legs, and paralysis of the bladder; the latter existing as a sole symptom, perhaps for months or even years. Spasmodic paralysis of the legs may follow, but rarely complete paraplegia. The patient moves about slowly, the legs are stiff and progression is painful as though there were a combination of intense muscular spasm along with the paresis. Sexual power is diminished in most cases. There is a decided tendency to improve, especially under energetic treatment. The author maintains that in bearing this syndrome in mind he has been enabled to diagnose the condition before enquiring into the existence of previous syphilis, and the distinction is readily made from the other chronic spinal affections, tabes, sclerosis *en plaques*, compression myelitis and syringomyelia. From spasmodic tabes, it is recognized by the existence of troubles of sensation, and deranged bladder formation, by the slight intensity of the muscular spasm and by the difference in evolution.

It has often been confounded with transverse dorsal myelitis, but in syphilis paraplegia is only exceptionally complete and that usually only for a short time.

In thirteen out of the twenty-two cases observed, the condition appeared within three years from infection. The lesions apparently occupy the dorsal segment and only involve a portion of the thickness of the cord: the posterior-half of the lateral columns, the posterior columns, the posterior part of the gray substance.

Attention is called to the following debatable points: 1. Do a sufficient number of cases of dorsal myelitis of specific origin exist to make a special form of myelitis? The author believes that from thirty-five to forty per cent of chronic cases are of syphilitic origin.

2. Has this form clinical characters of its own?

3. Among the many forms of syphilitic affections of the spinal marrow is this one sufficiently represented to separate it from the complex cases where several forms are associated in the same subject? And finally does the symptom-complex always correspond to an anatomical lesion.

From the large number of cases observed by the author he feels justified in creating a form of spinal paralysis purely syphilitic, but further study of the question seems called for.

CHARLES W. ALLEN.

Book Review.

Précis Élémentaire de Dermatologie. Par MM. L. BROcq et L. JACQUET. Première Partie, Pathologie Générale Cutanée (General Pathology of Skin Diseases). Pp. 172. Paris: G. Masson, 1893.

In these days of book-making without end it is refreshing to come across something new. This little book now before us gives, in simple form, the general principles of the pathology, etiology, diagnosis and treatment of skin diseases. We are promised a second part in which the different dermatoses will be described. That will probably be more like the usual "manual"; this is quite different from any small book that has yet appeared, and is admirably adapted to impart to the student the general principles of dermatology. It is quite unique and thoroughly commendable.

We would especially note the following as specimens of the book: 1. That the youngest children of a family usually present the family predispositions to diseases in a far more marked way than do the older children, because, when they were conceived, their parents' bodies were then more thoroughly impregnated with the excrementitious products, and the toxins that produced the disease the children inherit, than they were when the older children were conceived. This does not apply to syphilis, which follows a reverse law. 2. That the multiple and disseminated lesions of seborrhœal eczema are due to the absorption by the skin of toxins produced upon its surface by the parasites that cause the isolated patches of seborrhœal eczema. These toxins being absorbed, poison the system and produce lesions, not like the original ones, but like those due to internal causes. 3. That hydrotherapy is one of the most efficacious medical agents we possess for the treatment of skin diseases, specially in the form of the hot douche. If this is not attainable, a good substitute for it is squeezing a big sponge over the spinal column for twenty to sixty seconds at a time and twice a day. 4. It is absolutely impossible to classify skin diseases at the present time. Until we acquire more knowledge, it is well to divide them into six groups: 1. Deformities of the skin. 2. Artificial eruptions. 3. Parasitic diseases. 4. Microbic diseases. 5. Neuroses. 6. A group containing all the rest alphabetically arranged. As we increase in knowledge, the last group will grow smaller and the former ones larger, new ones, perhaps, being added.

G. T. J.

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SEMINAL VESICULITIS.¹

BY

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New York.

PROBABLY no important portion of the genito-urinary system has received less systematic study and consideration at the hands of surgeons than the seminal vesicles. In fact, it is quite common, apparently, to consider inflammation of these sacs to be part and parcel of prostatic inflammation and not to attempt a further differential diagnosis. As, however, there is a marked difference in the treatment and the prognosis between affections of these organs, it is essential that the surgeon should make a correct diagnosis. The literature on the subject is chiefly of a general nature, though Jordan Lloyd of Birmingham has written a number of forcible articles on the subject in which attention is called to the frequency of inflammation in these parts. From these articles, however, one is lead to believe that radical surgical measures, such as aspiration or extirpation of the vesicles are frequent and necessary in order to insure a cure, little stress being laid on the efficacy of less radical surgical procedures, which, in my experience are all that are required in the vast majority of cases exclusive of tubercular inflammation. I have been especially stimulated in my investigations in this direction by numerous ideas which have been imparted to me by Dr. Keyes, who has also been

¹Read before the May, 1893, meeting of the Genito-Urinary Section of the N. Y. Academy of Medicine.

cognizant of a number of cases which I have studied. It has seemed well to treat this subject at first under the general subdivisions of ætiology, frequency, symptomatology, diagnosis, treatment and prognosis; after which the special histories as taken from the records of a number of the cases will be given in some detail in order that illustrative and particular points may be clearly brought forth.

Ætiology.—*Gonorrhœa* is the cause, more or less remote, of the disease under consideration, in the great majority of instances. Sometimes an acute gonorrhœa will extend to the deep urethra, and thence to one or both vesicles, setting up a very acute inflammation of the part. The corresponding spermatic cord and epididymis, especially the former, are liable to be involved secondarily in such instances, though the most acute cases may, and often do, occur unassociated by any further involvement of the seminal apparatus. The converse of this statement also, is practically true, namely, that one may have an acute gonorrhœal epididymitis, less commonly a similar acute inflammation of the spermatic cord with very little involvement of the corresponding vesicle. I say very little involvement, for of course there must be some, but still it may be so slight as to be very transient, disappearing without treatment long before resolution has commenced in the testicle or cord, and leaving behind no evidence of its previous presence.

Commonly seminal vesiculitis due to gonorrhœa is sub-acute or chronic in character, dependent for its existence on the effects of a preceding gonorrhœa, rather than directly on the disease itself. In these cases one usually gets a history of a gonorrhœa, the remains of which have persisted perhaps for years, as a continuous or relapsing posterior urethritis. Besides this chronic posterior urethritis one often finds associated as auxiliary predisposing causes a history of sexual excess, or free indulgence in alcoholic stimulants, though such a combination is not at all necessary. Rarely simple vesiculitis in a chronic form is found in individuals who have never had gonorrhœa. In such cases the cause is usually masturbation, sexual excess, or both, continued over a considerable period and having their commencement at a tender age, generally from 12 to 16. In several such cases patients have told me that when quite young boys they were seduced by grown women who, for a considerable period taxed their powers to the utmost. Such a previous history, however, is not essential in these non-gonorrhœal cases, for rarely examples of this condition are observed in individu-

als who have never apparently abused their sexual organs. Here the cause is to be found in long continued nervous strain and over-work in an individual naturally high strung and neurotic.

Then, again, tubercle and very rarely malignant disease may be the causes for vesiculitis.

Frequency.—It is impossible for me to give any statistics relative to the frequency of this inflammation. Within the last year and a half, however, I have had under observation and studied fully twenty cases, which would seem to indicate that the disease, taking into account its varying forms and intensities, is not very rare.

Symptoms.—In considering symptoms the benign forms of the disease will be noticed first and more at length, since they offer greater variations in this respect than the tubercular and rare malignant forms.

Among the symptoms, disturbances of the sexual function are most important and most constant. The character of these disturbances, however, varies greatly in different cases. In the majority the disease is accompanied by a marked diminution in sexual desire; in some the desire has entirely disappeared. In a minority of the cases, however, the desire is increased sometimes to such an extent that the craving for intercourse seems to be almost continuous. Still in these instances little or no gratification or relief seems to be afforded by coitus. The history of erectile power corresponds closely to that of sexual desire. In one extreme erections are wholly wanting while in the other they are so prominent and persistent as to be a painful feature of the disease. The act of ejaculation during coitus in many cases is very precipitate, often occurring together with the accompanying failure of erectile power before an entrance has been effected. Then again ejaculation may be tardy and accompanied by pain, sometimes so acute that medical aid is summoned. Oftentimes after intercourse there is a feeling of discomfort somewhat indefinite in character referred to the perineal region, accompanied in many instances by considerable mental depression. Complaint is also often made of the frequency of seminal emissions. Sometimes the control over them becomes so weakened that they occur during mental activity at the slightest sexual suggestion. These involuntary emissions are frequently followed by local discomfort and mental depression, and occasionally they are associated with some pain, though this last is not liable to be nearly so promi-

nent a feature as when associated with the ejaculations accompanying coitus. Another point of importance with reference to involuntary emissions in some of these cases is that coitus often has no effect in reducing their frequency, just as many, or perhaps more than usual occurring shortly after the sexual act. The amount of seminal fluid thrown out during intercourse, as shown by collecting the same in a condom, is usually small in amount and, in many cases, where both vesicles are found to be involved, the freshly collected spermatozoa, as seen by the microscope, are lifeless and reduced in numbers. In all the gonorrhœal cases pus in varying amounts is present, it being very abundant in acute cases, gradually diminishing in quantity as the case becomes chronic and quiescent till at last little remains. In other forms of simple vesiculitis which have no gonorrhœal antecedents the amount of pus present is moderate. Blood corpuscles in large or small amounts may also be found in the fluid. One often sees the statement that bloody emissions in these cases are a prominent diagnostic feature. When they occur they are of course of very positive diagnostic value, but the percentage of cases of vesiculitis in which the semen is discolored by blood sufficiently to be noticeable is very small. Also when there has been a moderate admixture of blood it is more usual to find the semen greenish rather than reddish or brown. This is due to processes of oxidization in connection with the hæmoglobin. Considerable blood occurs more frequently in the very acute, and at intervals in the very chronic cases than otherwise. In the first class of cases the hæmorrhage is due directly to the intensity of the inflammation; in the second, to the rupture from time to time of the capillaries lining the inside of the vesicle which have become enlarged by reason of the long standing inflammation. This last class of hæmorrhages is exactly analogous to the vesical hæmorrhages which occur in old prostatic cases accompanied by chronic vesical distension. The consistency of the seminal fluid in these cases is generally greater than normal, and sometimes in the sub-acute and chronic cases it is gelatinous. When seminal ejaculations from such instances collected in a condom are examined shortly after emission these gelatinous masses are seen mixed with the associated prostatic fluid which is much more liquid. If the mass is left standing long it becomes homogeneous in consistency, the more liquid prostatic fluid seeming to act as a solvent. The best way, however, to demonstrate the gelatinous nature of the fluid is to express it directly from the

vesicles by means of the finger in the rectum, a process which will be explained later on.

If patients of this class are constipated, and consequently strain at stool over a large, hard movement, some of this inspissated vesicular material is liable by such exertion to be squeezed out of the vesicles and to appear at the meatus as a gluey mass. Patients frequently make mention of this in relating their symptoms, and for that reason it may, occasionally, be a sign of some value. Sometimes, however, the fluid appearing at the meatus under such circumstances is prostatic and not vesicular, so this symptom is not of positive significance. Occasionally cases of seminal vesiculitis are accompanied by a profuse urethral discharge which persists in spite of treatment directed toward the urethra but which speedily subsides of its own accord as resolution takes place in the vesicles. Why such a discharge should co-exist or cease in this manner I cannot at present explain. Functional disturbances of micturition are not infrequent though oftentimes the urinary act is perfectly normal. I have seen one case where the urgency to urinate was so great as to be uncontrollable, the individual having to wear a urinal. Such an extreme instance is of course rare, still it is common to find cases where the urgency is more than normal. In these instances it is sometimes found that the periods of urgency correspond to those of sexual excitement or disturbance. Then, again, instead of urgency the opposite condition may exist, it being very difficult and perhaps impossible for the individual to relieve himself, owing to a temporary spasmodic condition of the deep urethra. Such a spasmodic condition may last for hours and then pass off, allowing the urine to come in a free stream. Much more frequently, however, the spasm is at no time sufficient to wholly cut off the stream, but allows the urine to be voided by dribbling or in little jets. Pain in connection with urination is often complained of, sometimes at the head of the penis, sometimes along the canal as the urine is passing and then again at the vesical neck at the end of the act. A large percentage of the individuals afflicted with this disease are extremely neurotic. In some instances it would seem as if this neurotic condition predisposed one to seminal vesiculitis, still such could not be so in most of the gonorrhœal cases. Localized neurotic sensations are frequent and so various that it would be difficult to classify them. Owing to these sensations some patients become strongly impressed with the fact that a vesical calculus or tumor, a cancer of the prostate or some similar

severe malady exists to account for their sensations. Many general nervous symptoms also may co-exist which seem to depend on the condition of the vesicles ; at any rate, such symptoms which have oftentimes been very lasting, frequently wholly and permanently disappear after resolution in the vesicles takes place. In the histories of the cases which I will later on record, a number of instances where general nervous sensations were associated will be given. In acute cases, while the disease is developing, there may be quite a rise of temperature. In these cases also much tenderness on pressure is frequently complained of over the pubes or in the inguinal region corresponding to the vesicular inflammation. Evacuation of the bowels may be accompanied by sharp pain in much the same manner as takes place in acute prostatitis. Chronic cases, however, have no temperature unless it be to a slight extent during an acute exacerbation. External pressure and bowel movements also generally fail to demonstrate tenderness.

Tubercular vesiculitis is oftentimes secondary to active tubercular involvement of the vesical neck or of the corresponding epididymis, and generally the active symptoms associated with the disease in these neighboring parts are sufficient to mask whatever symptoms may be due to the disease in the vesicle. In fact it may be said that as a rule tubercular vesiculitis of itself occasions comparatively little discomfort until it becomes so extensive as to greatly distend the vesicle, converting it into a pus sac, in which condition the local annoyance due to the abscess becomes prominent.

Concerning the symptoms associated with the rare condition, primary malignant disease of the vesicle, I have nothing special to say as I have never seen an example of such disease.

Diagnosis.—It will readily be seen that a large number of affections may be simulated more or less closely by seminal vesiculitis owing to the varied and numerous symptoms which pertain to it. The following diseases are among those most easily confounded with the malady under consideration, namely true spermatorrhœa, the various sexual neuroses, prostatic affections, both inflammatory and neurotic, posterior urethritis, stricture, vesical calculus, rarely renal calculus, vesical tumor and inflammatory affections of the bladder generally. Besides these, the general nervous symptoms associated with and apparently dependent on the vesiculitis may simulate a consider-

able number of maladies which have seemingly no connection with the sexual or urinary organs, such as intestinal colic, numbness of the extremities, temporal headache, etc. In order to demonstrate seminal vesiculitis the vesicles themselves should be examined. This can be done quite readily by rectal feel combined with bimanual palpation. To accomplish this, the patient presenting himself with full bladder, should, while standing with his knees straight, bend the body forward at right angles. Then the operator should introduce the forefinger of one hand well into the rectum, the fist of the other hand exercising firm counter-pressure over the pubes. By these means the end of the forefinger will in all ordinary cases reach well beyond the posterior margin of the prostate. The bodies of the vesicles can now be detected one on each side beyond the posterior prostatic border. Only the lower half of the body of the vesicle can be felt ordinarily by the finger, the rest being beyond reach. If a vesicle is the seat of disease it is almost always distended sufficiently to be apparent to the touch. At times a vesicle in this condition feels soft and smooth, much like an engorged leech; then again nodules or plates of induration can be demonstrated in its walls. Besides being distended it is, if diseased, tender to the touch, sometimes, especially if the case is at all acute, very much so. Aside from the valuable evidence which one can get directly from the rectal feel it is most important in diagnosing these cases to get a specimen of the vesicular contents. In order to accomplish this firm pressure is made by the tip of the forefinger on the body of the vesicle as far back as it is possible to reach. The tip of the forefinger is then pressed slowly and firmly forward along the line of the vesicle. The manoeuvre is aided by counter-pressure over the pubes with the free hand. This procedure may be repeated several times. In this manner some of the vesicular contents, provided the sac is diseased and consequently distended, can be pressed out along its ejaculatory duct and into the prostatic sinus. Should the patient be now directed to urinate, the vesicular mass, if present, appears in the urine and can be examined microscopically. If a vesicle is healthy nothing can be pressed out by such manipulation, though a slight turbidity may be imparted to the color of the urine voided immediately afterwards. This turbidity is probably caused by prostatic secretion. The vesicular fluid thus pressed out, if examined speedily under the microscope, before the urine has a chance to disintegrate it, commonly appears thick and gelatinous, holding in suspension

dead spermatozoa, some pus corpuscles and many epithelial cells. If, however, the case is acute, the expressed fluid is liquid and quite purulent. In these cases it does not separate out by itself in the urine, but quickly mixes with it, lending an appearance of general turbidity to the fluid as it is voided. Occasionally where blood is present in the vesicle it may be sufficient to discolor the urine passed after vesicular manipulation. If, in attempting a differential diagnosis in a given case, a thorough observance of the rules of procedure which I have just described in detail, show negative results, then seminal vesiculitis can be excluded from the group of diseases under consideration. If, however, on the contrary, seminal vesiculitis is shown to exist it would not be right to exclude all the other suspected maladies without special investigations with reference to each of them.

Treatment.—It would, of course, be unjustifiable for me whose experience so far has been limited to about twenty cases, to lay down in a dogmatic manner rules for treatment. I therefore announce that the treatment I at present favor, although it has proved efficacious and in numerous instances positively curative at my hands, had still better be considered somewhat experimental in character. If, therefore, it fails at the hands of some others, or in fact, if carelessly done, it proves injurious, I do not hold myself responsible for its advocacy until I have made still further investigations. In acute cases the treatment should be palliative unless the intensity of the inflammation be extreme, in which instance perineal aspiration, or what is better, perineal incision, may be called for. Cases so acute, however, as to require these latter measures are rare. Palliative treatment consists of rest in bed, opiates to subdue pain and spasm and extensive hot poultices applied to the inguinal region corresponding to the involved vesicle. The testicles should also be carefully supported so that all drag or tension should be removed from the cord in order to prevent the inflammation from extending to these parts. Moderate diuresis and internal medication such as is appropriate in acute gonorrhœa complete the treatment. All forms of urethral injections or instrumentation should be abandoned. The bladder also should not be disturbed, except occasionally where there is urinary decomposition or where the acute inflammation causes retention. In such cases, of course, the catheter should be used and the bladder disinfected. In a good percentage of these cases, provided sufficient rest is taken, complete resolution

takes place. Some of them, however, become chronic. Sub-acute and chronic non-tubercular cases rarely yield in a satisfactory manner to general modes of treatment. Formerly it was common to send such cases on long voyages or to order them to live a rough out-door life, their medical adviser expressing the hope that they would be well sometime in the indefinite future. It is to this class of cases that I have particularly directed my attention. Such vesicles are always distended. They have, in fact, lost their muscular tone. During the sexual orgasm they contract feebly and not sufficiently to expel in some cases, any, and in most cases but little of their stale contents. To effect a cure the problem is how to restore the muscular tonicity of these sacs. If this is done, nature, in all the cases I have observed, seems willing and able to do the rest

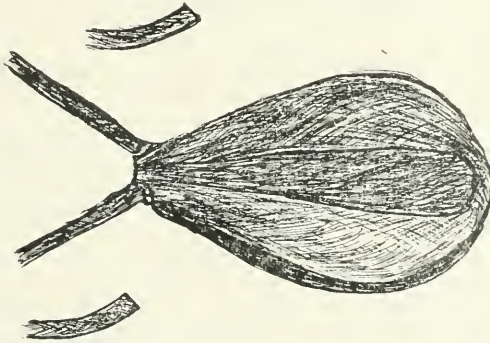


FIG. 1.

KEYES' RUBBER BAG FOR PRESSURE ON THE VESICLES.

and to complete the cure. As the muscular tonicity has been lost by reason of the long continued over-distention, it seems evident that the proper treatment would consist in keeping the vesicles quite empty for a time, thus allowing them to contract, and, as a consequence, regain their muscular tone. After the muscular strength is regained then no further active treatment is necessary, though a careful watch should be kept for some time to make sure that treatment has not been discontinued too soon, before, in fact, the muscular fibres have become sufficiently strong to accomplish what is required of them. Acting on this idea, Dr. E. L. Keyes, a few years ago, designed and had constructed a rubber colpeurynter containing two lateral air chambers. The instrument was pushed well into the rectum, and

then inflated and drawn firmly forward, the expectation being that the distended air chambers pressing on the vesicles would squeeze out their contents along the ejaculatory ducts and into the urethra. I show, here, two patterns of this instrument, both designed by Dr. Keyes. The second one has a handle in order that the traction and pressure may be the better regulated.

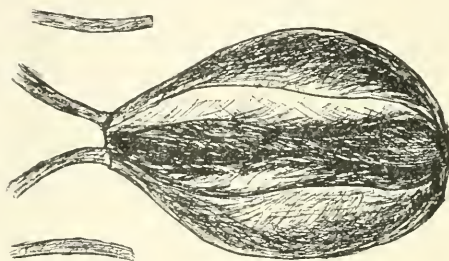


FIG. 2.

THE SAME INSTRUMENT WHEN DILATED.

These instruments accomplished their purpose to a certain extent. They were deficient, however, in that not only their introduction and manipulation were painful and objectionable to

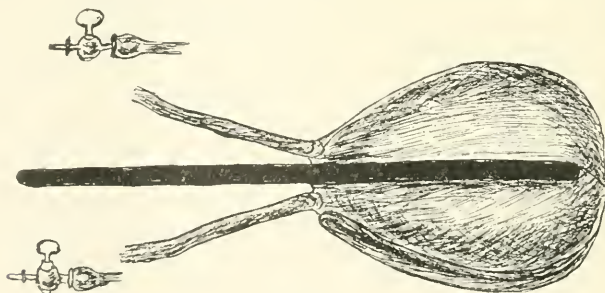


FIG. 3.

THE SAME INSTRUMENT WITH THE HARD RUBBER SHAFT ATTACHMENT.

the patient, but also and more important, the pressure of the air chambers on the vesicles could not be well regulated or adjusted. They were, therefore, abandoned, and the forefinger employed. The technique of the manipulation with the forefinger, aided by abdominal pressure with the free hand, has already been given while treating of diagnosis, and need not be

repeated. It should be done on a full bladder, and after the manipulation the urine should be voided in order that the surgeon may see how much has been expressed. This treatment should be repeated not oftener than once in four days, and in most cases under active treatment as often as once a week. If it is done too frequently, or too severe pressure with the forefinger is employed, acute symptoms may be stirred up which may leave the patient worse off, apparently, than before treatment was commenced, besides at times causing an acute epididymitis. I have had the misfortune to cause such an acute attack in two of my earlier cases from too vigorous and too frequent treatments. One of the cases was too acute in the first place to be suitable for this form of treatment, and in the second case I failed to stop the treatment when acute symptoms began to reappear. The chief signs of a rekindling of acute symptoms are the increased tenderness in the vesicular region, which the patient experiences on manipulation, and the appearance of the fluid pressed out of the vesicle, free pus appearing which renders the whole specimen turbid if the part is threatened by an acute inflammation. Another accident which may occur in very chronic cases if too severe pressure is employed, and probably in some such instances where the appropriate amount is employed, is hæmorrhage into the vesicular sac. Such a hæmorrhage may be severe, causing great distention and much pain. This accident occurred in one of my chronic cases, probably from too severe pressure in trying to squeeze out a mass of very inspissated material. It will thus be seen that this treatment must be used with much care to avoid oftentimes disagreeable accidents. These accidents will probably be sufficiently frequent in the hands of some to cause them to vigorously decry this form of treatment, and to condemn it altogether. In the cases, however, which progress favorably, the tenderness of the vesicles gradually disappears, the amount of material squeezed out each time becomes less and finally nil, the vesicles, themselves, feel less prominent to the touch, and eventually entirely escape detection and the patient is cured. In numerous cases this vesicular pressure is all that is required to effect a cure. In others, however, supplementary treatment may be indicated. If general anæmia and lack of nerve force are associated conditions, then *nux vomica*, cod liver oil, iron, etc., may be of great value together with light out-door exercise and a generous diet. In all cases where any vesical fermentation co-exists, and in some cases where the expulsion force of the

bladder seems sluggish, vesical lavage immediately after the squeezing of the vesicles may be of value, the bladder being filled with an antiseptic stimulating substance, a solution of corrosive sublimate from 1 in 12,000 to 1 in 20,000 often serving the purpose. The patient is then directed to void this solution in the natural manner, thus bathing the deep urethral portion of the canal. Deep urethral injections of stimulating or astringent substances, always in cases which are at all acute, and in most chronic cases, are injurious, aggravating the existing symptoms frequently to a marked degree. Sometimes, however, in the convalescent stage of sub-acute or chronic cases, where for a considerable period the vesicles have been stripped of their accumulations, and where the muscular tone has been partially re-established, then such deep injections may be used with advantage. In rare instances deep stimulating injections give relief in very chronic cases unassociated with rectal pressure. Sounds in most cases are distinctly injurious. In a few chronic instances, however, they may be of some temporary benefit in allaying symptoms. Sexual intercourse should be prohibited while these cases are under active treatment. When convalescence is fully established coitus once or perhaps twice a week sometimes seems to exercise a favorable influence by stimulating the contractile power of the vesicle. It should always be moderate, however, and if it taxes the strength of the vesicle too much it should be speedily abandoned.

In tubercular cases where the sac is converted into a bag of pus, and where the general condition of the patient warrants it, extirpation of the vesicle may be demanded. Such also should be the treatment in case of primary malignant involvement of the part, provided the diagnosis be made sufficiently early. Operative interference has also already been advised in occasional very acute cases. In some of these last, however, incision into the sac and drainage may be all that will be required. The ordinary method to reach and remove the vesicle is by a transverse perineal incision and by a dissection between the rectum and prostate. Lloyd of Birmingham (*London Lancet*, October 31, '91), Roux of Paris (*La Semaine Médicale*, April 8, '91), and others have advocated this procedure. Villeneuve of Marseilles (*La Semaine Médicale*, September 23, '91), has removed tubercular vesicles by incision over the external inguinal canal and traction on the cord, thus bringing the vesicle into view. I tried this procedure in one case; the cord, however, was brittle, probably from tubercular infiltration, and

broke on being subjected to moderate tension long before the vesicle had been brought into view. It therefore seems to me that this latter method is not of practical value.

Prognosis.—Most acute gonorrhœal cases eventually recover, though oftentimes they are very tedious to both surgeon and patient, since the treatment so largely consists in abstaining from active interference. Some of them become chronic. Sub-acute cases, especially if not associated with gonorrhœa, generally yield readily to treatment and are soon cured. Many chronic cases can apparently be cured in from three to six months' time, frequent pressure only being required from six weeks to three months. During the remainder of the period the case is simply watched from time to time, to see that there is no tendency to relapse. In some chronic cases, however, where there has been much vesical distention, together with extensive thickening of the walls of the sacs, the period of treatment may be much longer before a cure can be said to have taken place, and perhaps in a few of them a positive cure never does take place, though the improvement may be very great. Only a longer study devoted to the subject can settle this last point.

I will now recite briefly the histories of a few of my cases which may be of interest :

A., 23 years old, contracted his first gonorrhœa about a month before reporting for treatment. His attack had been apparently light. Anterior injections had been used, but as he had been traveling much, he had not been able to regularly follow any treatment. When he first presented himself he had posterior urethritis accompanied by painful micturition every few hours day and night. Deep urethral applications were given, and the case improved. Shortly afterwards, apparently as a result of rather active exercise, he was attacked by a sudden pain in the left suprapubic region radiating down into the testicle and upward toward the hypogastrium. This pain was associated with a chill and a considerable rise of temperature. Rectal examination showed great tenderness over the left vesicle. In a few days the vesicle swelled much and became excessively tender. The left spermatic cord also became inflamed and swollen. The epididymis, however, was never affected. The patient was in bed almost four weeks. Continuous fever lasted over two weeks. The patient was not allowed out of bed till all the tenderness and most of the swelling in connection with the vesicle had disappeared. During the fever the urine was perfectly clear and there was no discharge. When convalescence com-

menced, the urine became loaded with pus, and a profuse discharge commenced. At the end of the four weeks, when the patient was allowed to get up, the urine was quite clear; it was voided at the proper interval without pain, and the anterior discharge had stopped. The treatment employed was the same as recommended in this article for acute vesiculitis. This patient got entirely well soon after leaving his bed.

B., 24 years old, presented himself complaining of frequent urinations, especially at times, associated with a burning sensation in the penis and pain above the pubes. Sometimes this pain was so severe that he had to quit work and lie down. He no longer had any sexual desire, and very rarely an erection. These symptoms followed a gonorrhœa which he had three years ago, and have persisted off and on ever since. There was pus in the urine and a slight anterior discharge. Patient had had anterior urethrotomy performed, and had been treated by means of large sounds. Since these procedures he had been worse. Rectal exploration showed the left seminal vesical to be the seat of trouble, and to be considerably enlarged and somewhat tender. Fully a drachm and a half of inspissated material was squeezed out, making the patient feel very faint. After four months' treatment and observation the patient was discharged well. He soon got married and has been in good health ever since.

C., 33 years old, comes complaining of frequent urination, especially at night, associated oftentimes with violent and unnatural erections. Sometimes the vesical tenesmus was so constant and severe, that he had to use a rubber urinal on going about. His sexual desire was greatly intensified. He was married, and in spite of sexual intercourse practiced once or twice in the twenty-four hours he had frequent emissions. He had no lasting satisfaction after intercourse, but no pain was associated with the act. Seven years before he had had gonorrhœa, accompanied, so he stated, with swollen testicles and inflammation of the prostate. He then got well for a time, though at intervals he had had some of the present symptoms. He ascribed his present attack, however, to the passage of a large sized sound some months previously. On examination, I found considerable free pus in the urine, evidently from the deep urethra. Both vesicles were distended, and much material was removed. Treatment immediately gave relief to all his distressing symptoms, and after two weeks I sent him home with a letter to his doctor. Since then I have received good reports from him.

D., 30 years old, came complaining of impotency. He began masturbation when 9 years old and practiced it to a considerable extent until 22. He had also indulged excessively in sexual intercourse. Formerly he was very potent and passionate, but of late years his erections had failed him, and oftentimes on attempting sexual intercourse he had had an emission before accomplishing an entrance. He was very melancholy. He had never had gonorrhœa. He had no other local symptoms. Both vesicles were found to be greatly distended. Much improvement followed treatment. The patient was, however, hard to manage. As his sexual power came back he immediately started in to indulge it to the limit of his capacity, and after a time returned very repentant, the vesicles having relapsed back nearly to their former distended condition.

E., 42 years old, married, presented himself complaining of a lack of expulsive force on attempting to urinate. Oftentimes the urine came away as a dribble. In the morning on arising he could rarely urinate at all, and frequently had to resort to a hot sitz bath to accomplish his purpose. His urine was clear and contained nothing abnormal. His sexual powers were very weak. Intercourse frequently caused him some pain at the time of ejaculation and was followed by a dull, disagreeable sensation in the perineum. He had no stricture. Treatment by large sized sounds did not benefit him. The vesicles were found to be greatly distended and their walls were much thickened. This case has been under observation and treatment for nine months. There has been much improvement in symptoms and the patient states that he has gained flesh and feels better than in a long time. He is not, however, well yet, and very likely may never fully regain his vesicular power. In this case further observation is needed.

F., 35 years old, married, never had a venereal disease, and never had abused his sexual organs. He had, however, been overworked bodily and mentally for a number of years, and it was to this that I ascribed his troubles. He complained of frequent urination, associated with a severe pain above the pubes which he had had for several months and for which he could not account. He thought he had a stone in the bladder. His sexual feelings were about as they always had been. His urine was clear, of light specific gravity and rather abundant. He had no stone or stricture. There was no special cause in the history of the case to point to vesicular disease. Still these or-

gans were found considerably distended. All disagreeable symptoms passed away as a result of three treatments, the last one being combined with a deep urethral injection of nitrate of silver.

G., 26, married, had gonorrhœa three years ago. He recovered apparently from that disease without much trouble and got married two years ago. Felt well for some time after marriage and had a child born to him. After a time he began to be troubled much by seminal emissions in spite of regular intercourse. Sexual intercourse also became distasteful to him and was followed by a feeling of depression. He began, besides this, to suffer from severe attacks which seemed to be intestinal colic. He consulted me for these colicky pains making no mention of the condition of his sexual organs. I tried in vain to cure him by treatment directed toward the intestines. One day he stated to me that he was troubled by frequent emissions. Knowing that he was married I considered such a condition of affairs wrong, and on making an examination of the vesicles I found one of them tender and distended. After a very short period of treatment the colic disappeared and his sexual centre began to improve. At the present time this patient is, to all intents and purposes, well, and so considers himself. He however, has to exercise moderation in his sexual relations and at times still has an emission notwithstanding intercourse.

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REMARKS ON PRE-VESICAL INFLAMMATION.¹

BY

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Boston.

SINCE Retzius, a Swedish anatomist published a paper in 1858 describing in detail the anatomy of the lower abdominal wall and pre-vesical space, many cases of inflammation in this region have been reported; and many articles have been written, chiefly by French authors, with a view to explaining the pathology of these inflammations and tabu-

¹ Read at Annual Meeting of the American Association of Genito-Urinary Surgeons, at Harrogate, Tenn., June 14, 1893.

lating our knowledge of the subject including the cases reported.

The writer has recently had the privilege of examining a case of inflammation in this region occurring in the service of Drs. Bradford and Post at the Boston City Hospital, and has been interested to look up the present-day knowledge on the subject. A resumé of this knowledge, apparently, does not exist in English, and it is hoped that the present one may prove of use to some of us.

The pre-vesical space, often called the cavity of Retzius, is a shallow space entirely external to the peritoneum, and serves in part to give the bladder room in which to expand when filled with urine. It is bounded anteriorly by the pubes and the anterior layer of the transversalis fascia of Cooper and behind by the bladder and by the posterior layer of this same fascia. The part of the space which extends upward beyond the pubes is limited above by the line of union of the two layers of fascia which are given off at the lower border of the sheath of the recti muscles posteriorly, and has for its side limits the union of these layers with the aponeurosis of the transversalis and the oblique muscles. Below the space is limited by the prostatic sheath and the superior aponeurosis of the true pelvis, so that pus in this space can get back to the rectum and to the iliac fossæ on either side of it.

Now let me see if I can make this a little clearer. It will be remembered that the sheath which covers the recti muscles of the abdomen on their posterior surface, does not extend all the way down to the pubes but ceases at a point between the umbilicus and pubes, and ends in a crescentic border which the French writers call the "semicircular fold of Douglas." This leaves the lower part of the posterior surface of the recti muscles without a sheath. From this lower crescentic edge of the sheath two thin layers of fascia are continued. The anterior one, which is very thin indeed, covers the lower posterior surface of the recti muscles, left uncovered by their own sheath, and attaches itself to the symphysis. The posterior of the two layers extend down behind the bladder to join the pelvic fascia. These two layers of fascia are merged at the sides into the edge of the aponeurosis of the transversalis and oblique muscles. It is evident that there are two distinct spaces in this region; First, A submuscular space just behind the lower part of the recti muscles and shut off from the pre-vesical space proper by the thin anterior layer of fascia, and second, the pre-vesical space itself,

shut in above between the two layers of fascia, and below between the anterior bladder wall and the symphysis pubis.¹

Enough has been written about the anatomy of the so-called space of Retzius to create a very general interest in the pathology of the region; and cases of many different kinds have been reported as instances of pre-vesical abscess. Various different schemes for arranging these cases have been suggested, so that from the writings on the subject it is difficult to get an idea of what is meant by a case of pre-vesical abscess.

As may be supposed, suppuration in this region occurs as a result of traumatism (operative or otherwise), as a result of disease in neighboring organs such as the bladder, prostate, uterus, etc., and even a gonorrhœa has been the direct cause of pre-vesical suppuration in one or more instances, as a result of metastasis in pyæmia or typhoid fever. In other words we may have an inflammatory process in this region as in most other parts of the body from very many different causes.

A study of reports shows that when all such cases have been eliminated there still remain a number which have apparently no such reason for their existence. In other words, as far as our present knowledge goes, there are idiopathic pre-vesical abscesses. Englisch, of Vienna, has studied and tabulated the cases of this sort which he was able to find and published his tables in two articles (1889 and 1891). He finds in literature twenty-three cases of so-called idiopathic pre-vesical inflammation and adds ten more from his own experience.

In none of these could any possible cause for the inflammation be assigned. He thinks that all other cases may be conveniently classed under three headings: 1, those caused by traumatism; 2, those caused by metastasis, and 3, those caused by direct extension from neighboring organs or tissues. Let us leave these cases for brief consideration later and look first at the idiopathic form of inflammation, as these cases are by far the most interesting ones for us inasmuch as we are still in ignorance of their cause.

Although there have been a few chronic cases of pre-vesical inflammation in which there were no apparent symptoms until the appearance of the tumor, still in most cases the illness begins with symptoms of severe gastric and bowel disturbance.

¹ I purposely refrain from further anatomical detail as to the boundaries, etc., of these spaces, as the points mentioned are all that seem necessary for clearness and I believe they are all proven by many careful dissections made at different times by several anatomists (notably Retzius and Hyatt). The descriptions of them date back to the early years of this century.

There is usually constipation accompanied by colicky pain and vomiting, these symptoms being sometimes so severe as to cause a considerable degree of collapse. The constipation shortly gives place to a persistent diarrhœa, which is accompanied by loss of appetite and a general feeling of discomfort and uneasiness. These symptoms, referable to the stomach and bowels, are of sufficient severity to send the patient to bed. Within two weeks, and generally within a few days, from the beginning of the illness, the pain, which may have been the only symptom up to this time, which in any way localized the disturbance, and which may have been present either as a dull, heavy feeling in the lower abdomen or as a sharper pain in the pre-vesical region, becomes more severe and more sharply localized, the fever is more marked, and a tumor manifests itself above the symphysis, generally symmetrical in shape and looking very much like a full bladder. The catheter demonstrates an empty bladder and the diagnosis is made if one has followed the previous history of the case. The tumor may be rather asymmetrical in shape owing, no doubt, to the more rapid spread of the inflammatory process on one side than on the other, but it is usually symmetrical and its upper border is flat and sharply defined, so that the tumor is commonly described as being triangular in shape with the base of the triangle upwards and the point disappearing behind the symphysis pubis. Examination by rectum or in women by vagina, will not, as a rule, demonstrate the presence of any swelling, unless the trouble has been present for some time. Occasionally, the downward extension of the inflammation can be felt in this way. Disturbance of micturition is almost the rule in these cases, as one would expect, and yet a few cases are recorded where the micturition was so nearly normal as to be scarcely an inconvenience, while in one case, there was no such disturbance at all. Complete retention is not common, the disturbance being generally a constant vesical tenesmus with frequent and somewhat difficult micturition. The urine itself is generally normal although in cases of long standing a cystitis more or less severe is apt to develop with its attendant changes in the urine.

The inflammatory process terminates either in resolution, or more commonly in suppuration. If the trouble subsides without suppuration, the further history of the case is simply a gradual diminution in the severity of all symptoms, so that at the end of five or six weeks no trouble remains, and physical examination reveals nothing except perhaps a little induration

in the anterior abdominal wall or, as felt per rectum, at the base of the bladder in the neighborhood of the prostate and seminal vesicles. These areas of induration may remain unresolved for months, and if present at the base of the bladder may give rise to further disturbance of micturition.

If the process ends in suppuration, the beginning of pus formation is indicated by a sudden increase in the pain and fever with perhaps a well marked chill. The trouble with micturition may also increase in severity; and in some cases an œdema of the skin just above the pubes appears and may be the first indication of abscess formation. The abscess may break through its walls and carry the inflammation into any of the surrounding tissues or organs.

Most commonly it makes its way through the anterior abdominal wall and appears close under the skin, as a rule in or near the median line, the pus pointing in two places in some cases.

The pus may work down to the front of the thigh through the inguinal opening; it may break into the bladder, urethra, rectum or vagina; or it may perforate the peritoneum and get into the peritoneal cavity. Several cases of foetal fistula are reported, the bowel wall having tied itself down to the wall of the cavity by adhesions and then the perforation taking place. This complication may render the diagnosis very difficult as in the case which the writer examined at the Boston City Hospital in which such a fistula existed. This case, although one of pre-vesical suppuration is not reported in detail because its history shows conclusively that the pre-vesical abscess was merely an extension downward of an inflammation which began higher up in the abdominal wall, probably as an extravasation of blood in the right rectus muscle which was the nucleus of an abscess which broke through into the pre-vesical space.

The prognosis in these cases is not necessarily a bad one, as is commonly stated. Out of thirty-three cases collected by Englisch, including ten of his own, there were but four (4) deaths and in these four cases the abscess broke through into the peritoneal cavity and the patient died of a purulent peritonitis in each instance. In but one of these four cases was any attempt made to liberate the pent up pus by operation. This one was undoubtedly of tubercular origin. Of these thirty-three cases of idiopathic pre-vesical inflammation (and I have been unable to find any others recorded), fourteen subsided without operation or any but symptomatic treatment; seven were incised and slowly recovered; and the other twelve opened

themselves spontaneously, four through the anterior abdominal wall, two into the rectum, two into the bladder or urethra and four into the peritoneal cavity (one of these, in spite of the fact that a vent for the pus had already been provided by an operation).

The cause of these inflammations is at present unknown to us and we are not in a position to make any assertions with regard to it. Many surgeons believe that the process is a tubercular one, but there seems to be no proof of this at present beyond the fact that a goodly percentage, perhaps about thirty per cent. of the cases have a tubercular history, either personal or family. As for the treatment; it should be symptomatic and antiphlogistic until pus demonstrates its presence and then the sooner an incision is made the better. In women the attempt has been made once or twice to drain these abscesses through the vagina, but the cases have proved troublesome and the suprapubic incision seems to be the best means for drainage at our disposal. An early incision is advisable, of course in view of the fact that twelve per cent. of these cases have died from a purulent peritonitis resulting from perforation.

The question of a laparotomy for the relief of a peritonitis following perforation was not considered in any of these four cases.

Besides the class of cases just described, there are many reported instances of pre-vesical suppuration, similar in history to those already mentioned; but in all of them some very evident cause has been apparent. All have been either a result of external traumatism or dependent upon pathological conditions of neighboring organs. The cases which are directly attributed to external violence are few in number, and in them the injuries received have varied so much in kind and in severity, that but little can be done in the way of classifying them or making deductions from them. Among the accidents resulting in pre-vesical suppuration, may be mentioned a fall upon the abdomen from a horse; rupture of the gravid uterus during labor as a result of attempted version; rupture of the full bladder; suprapubic puncture of the bladder in a case of retention of urine; goring by the horns of a cow; gunshot wound of the pelvis with the bullet imbedded somewhere in this region. In this last case a fall served as the immediate cause of the inflammation which resulted in the formation of the abscess about the bullet after it had been in the pelvis for six years. Some of these traumatic cases have started as extravasations of blood, and some have

been purulent inflammations of the pre-vesical connective tissue. The cases run about the same course as the so-called idiopathic ones, and among the few which proved fatal were those of ruptured uterus, ruptured bladder, and the suprapubic vesical puncture. In the first two of these there was a large extravasation of blood into the pre-vesical space.

Whether some of the traumatic cases start *in* the abdominal wall and break into the pre-vesical space or not, it is impossible to say. A very small number (3 or 4) of cases are recorded where a pre-vesical inflammation appeared in the course of a typhoid fever. They may have started as blood extravasations in the recti muscles, due to diseased vessel walls, and then may have broken through the thin anterior layer of the transversalis fascia into the pre-vesical cavity. Of the three cases of which I have records, two recovered and one died from peritonitis following perforation into the general peritoneal cavity. It is suggested by several writers that pre-vesical abscesses probably do occur occasionally as metastases in pyæmia just as do peri-urethral abscesses. I have not found a report of any such case.

There still remain for mention the cases of pre-vesical inflammation, which are direct extensions of pathological processes in neighboring organs or tissues. Most of these occur in the male in the course of some vesical, prostatic or urethral trouble. Occasionally they follow uterine or peri-uterine inflammations. Cases of this sort are reported following chronic cystitis with and without the presence of calculi in the bladder; perforation of a bladder which contained a stone; stricture of the urethra; gonorrhœa and various forms of pelvic inflammation in the female. One case is recorded where the phlegmon followed an abscess in the joint at the symphysis pubis, which came on after a labor. Another very curious case is that of an inflammation of the umbilical veins in a newly born infant followed by a pre-vesical abscess and death on the 13th day. The autopsy showed all the pelvic organs healthy, but a purulent thrombosis of the umbilical vein. Still another interesting case is reported by Guyon, in which the autopsy, made five weeks after an internal urethrotomy for stricture, showed an abscess of the prostate, a perforation at the neck of the bladder into the pre-vesical space and a large pre-vesical abscess. Of twenty-four cases tabulated by Englisch (of course by no means all that there are recorded), eight died ($33\frac{1}{3}$ per cent.); but the cases resulted from such a variety of causes, and the accompanying conditions were so different in different instances, that these deaths must not be ascribed to

the pre-vesical abscess itself, which in some of these cases was only an incident.

To sum up then : There are a large number of reported cases of undoubted pre-vesical inflammation, of which rather less than half subside without suppuration, and rather more than half result in abscess formations. Many of these cases occur as a direct extension of an inflammatory process from neighboring organs, chiefly the bladder, prostate and urethra. A few occur as a result of traumatism, and an occasional one is metastatic.

The remaining cases may be classed at present as idiopathic cases. These have been carefully studied by Englisch, who reports thirty-three as follows : thirty-three cases with four deaths, ($12\frac{1}{2}$ per cent.) all from a general purulent peritonitis following perforation of the abscess into the peritoneal cavity. Of these thirty-three cases,

- 14 subsided without operation and without spontaneous opening.
- 7 were incised and slowly recovered.
- 12 opened spontaneously.
- 4 through the anterior abdominal wall.
- 2 into the rectum.
- 2 into the bladder or urethra, and
- 4 into the peritoneal cavity.

It is believed by many surgeons, though without proof so far as the writer is aware, that these abscesses are of tubercular origin. Of Englisch's 10 cases (from his personal experience), 4 had tubercular histories.

The prognosis is not necessarily unfavorable as is commonly stated, for of the 33 idiopathic cases but 4 died (12 per cent.) and of these 4, all died from a perforation into the general peritoneal cavity, and in only one of these 4 cases was an attempt made to liberate the pent-up pus by operation.

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NOTE.—Good lists of references may be found in the articles of Englisch and Castaneda y Campos, referred to above.

Death of Dr. Vidal.—We regret to announce the death of Doctor Émile Vidal, the distinguished dermatologist of Paris, which occurred on the 16th of June, 1893. Doctor Vidal was for many years connected with the Hospital St. Louis, and was at the time of his death one of the editors of the *Annales de Dermatologie et de Syphiligraphie*.

He has enriched dermatology by numerous important contributions, and was an active worker in our speciality up to the time of his death.

Society Transactions

THE AMERICAN ASSOCIATION OF GENITO-URINARY SURGEONS.

SEVENTH ANNUAL MEETING, HELD AT HARROGATE, TENN.,
JUNE 20 AND 21, 1893.

DR. EDWARD R. PALMER *President, in the Chair.*

(Concluded from page 324.)

A Case of Double Nephrolithotomy.¹—By DR. JAMES BELL, of Montreal.

THE PRESIDENT stated that many years ago, in the dissecting-room, he found in one subject three calculi imbedded in one kidney and two in the other. The stones were very rough and black. In the kidney that contained the three calculi, one of them occupied the pelvis and two the cortical structure.

DR. BRYSON said it is not uncommon to see blackened calculi. The dark color is probably due to the blood.

DR. CHISMORE said he has had no personal experience with cases in which calculi were found in both kidneys. The following case, however, is of interest in this connection. A man, upwards of 50 years of age, apparently in good health, stepped off the car and felt immediately a sudden pain in the region of the right kidney. This lasted for a few moments; then it passed away and he continued his work until two weeks later, when a tumor appeared in the region of the liver. This was aspirated by a surgeon in San Francisco, and some of the fluid sent to Dr. Chismore for examination. A diagnosis had been made of abscess of the liver. On examining the fluid, it was found to contain urea, and he ventured the opinion that the abscess was of renal origin. Subsequently, the patient was sent to him for examination; the tumor was centrally located, and was larger than a foetal head. When emptied by aspiration, it re-filled rapidly. An operation was then performed, and the tumor was lifted from its bed and ligated. The mass was of renal origin. On cutting down into the deeper tissues the ureter was brought into view; it was blocked by a large calculus, and a ragged, open cavity was found near its renal orifice. The man died from shock. That was many years ago, when operators were not attacking the kidney with the boldness they do to-day.

DR. BRYSON said that from Dr. Cabot's description, one of the man's kidneys was apparently hydronephrotic. He inquired why Dr. Cabot did not puncture and drain that kidney from the lumbar region?

DR. CABOT said his opinion about the right kidney was that it was practically useless. He was operating for the relief of suppression, and did not think that draining the right kidney would help that condition. The left kidney was regarded as the active one, and measures for relief were directed against that. Furthermore, the patient was advanced in years, and he was perhaps deterred by that fact from further prolonging the operation. Draining the right kidney might have proved a very good measure.

¹ Will be published.

DR. BRYSON said it is astonishing how much fluid these hydronephrotic kidneys sometimes will secrete. In two cases of nephro-lithotomy, the speaker said, he has succeeded in removing the calculi, in one case with entire satisfaction, the patient having carried the stone for a very long time; the stone was of large size and the patient was entirely cured by the operation. There was not, at any time, suppression of urine; there was not even oliguria. At the time of operation, the man was 59 years old. He gave a clear history of stone in the kidney since he was 27 years of age, and perhaps from childhood. His history showed that he had passed blood, and had troubles in that region when he was a child. Gradually, pain developed in the left side, always high up, with occasional severe pain on the right side. When the patient came under Dr. Bryson's observation, the left ureter was blocked to some extent, and the urine contained blood-clots and pus. Upon cutting down on the left kidney it was found spread out in a thin layer over a very large stone. The front aspect of the kidney (through a lumbar incision) was split up, the calculus peeled out, and a drainage tube inserted. The man made an uninterrupted recovery. The peritoneum was not opened. In two other cases he found that the calculus had ulcerated through the kidney, and set up a peri-renal abscess, and in both of these the patients subsequently died from infiltration and sepsis.

The speaker said he had an interesting case of complete anuria the early part of this year. The patient was a man, aged 56 years, an instrument maker. He was a very large, stout man. He had had slight trouble with his bladder, but nothing to speak of until last February, when he had an attack of complete suppression, without any considerable pain. He had eaten a very large dinner, and noticed that after this he passed no urine. Ordinarily, he passed urine in abundance. He went home in a state of uneasiness and on Tuesday he sent for his physician, who, suspecting retention, passed several instruments into the bladder; he failed to get any urine, but drew off a little blood. He then gave him an ordinary diuretic, with hot baths and continued this treatment without success until Thursday, when he sent for Dr. Bryson in consultation. The patient was flushed and restless, and complained of a feeling of distention in the right lumbar region. There was no pain. The bladder was empty. The man had a large abdomen and palpation was impossible. On deep pressure he complained of a slight sense of fullness and nausea. On the left side nothing could be found. The pulse was rapid, full and strong. Diuretin and digitalis were administered until Saturday, when it was determined to perform an operation. Before consenting to this another physician was called in, who recommended jaborandi, which was given in dram doses every three hours. The only effect of this was to whiten the skin and bathe him in perspiration and weaken his pulse. The anuria persisted. On Sunday afternoon Dr. Bryson said he had arrived at the conclusion that either both kidneys were blocked with calculi, or that the man had a deformed kidney—a horse-shoe kidney, or only one kidney and ureter, and that it had been blocked. The hemorrhage in the bladder was so severe that it precluded a cystoscopic examination for the purpose of searching for the orifice of the ureters. On Sunday afternoon right lumbotomy was performed for the purpose of searching for the kidney on that side. It was readily found and was surrounded by a great deal of fat. It extended high up under the ribs, and in passing the finger along the pelvis it was found that the right kidney

turned over towards the left side so far that it could not be followed all the way, and its lower border could not be felt at all. The kidney was very large, and the ureter passed down behind its transverse portion. The pelvis seemed to be a little swollen. The introduction of the aspirating needle was followed by quite a gush of urine from the kidney pelvis. The bleeding was moderate. A drainage tube was then inserted and the wound stitched and dressed. For eight hours after the operation the kidney drained freely; perhaps two or three pints of urine flowed out. The patient then became restless and rose from his bed; this was followed almost immediately by complete suppression of urine and the patient died on the ninth day after the onset of the original suppression. A post-mortem was not permitted. In this case, probably, the man had a horse-shoe kidney, with one ureter, which came down behind the kidney, and the original suppression was perhaps due to the fact that the ureter was compressed between the renal substance and the spinal column. Dr. Bryson said he did not know what the second suppression was due to. There was no displacement of the drainage tube. He regretted that he did not open the abdomen centrally in this case.

Cases of Urinary Infection in Which the Bacterium Coli Was Demonstrated in the Urine.—By DR. JOHN A. FORDYCE, of New York.

The writer referred to two cases of infection following operative interference on the male urethra, and one case of cystitis in the female, in all of which he had found the colon bacillus in a state of almost pure culture in the urine. He demonstrated cultures of the organism on gelatine and photo-micrographs of it made from cover-glass preparations of pus obtained from the urine.

In all of these cases the urine was acid in reaction.

DR. BELL said there is a long gap to be filled in between the discovery of the bacterium coli in cases of urinary infection and the clinical picture, with which the clinician is so familiar, before we can establish the relationship between cause and effect. The presence of these micro-organisms must be explained in some way. How did they find an entrance into the urine after the passage of an instrument into the deep urethra? The speaker said he has become quite firmly fixed in the opinion that the ordinary typical urethral fever (not including the forms which we describe as urinary fever), with chills, elevated temperature, etc., is due to a chemical poison of the ptomaine or leucomaine class. What the relationship is between that condition and the presence of the bacterium coli or other micro-organism is still to be investigated.

DR. ALEXANDER said that the study of the cases cited by Dr. Fordyce confirms the fact that we do find pure cultures of the bacterium coli in the urine; and, furthermore, that when they are present, urethral fever follows in the majority of cases. The speaker said his own investigations in this line, which are not yet completed, tend to show that in the vast majority of cases in which the bacterium coli is present, urethral fever follows, even though we take the utmost precaution as regards urethral antisepsis. That the bacterium coli is the cause of the fever we cannot positively say, but the presence of this peculiar micro-organism has been so often demonstrated in cases of urethral fever, after slight surgical interference, that it is a fair assumption to make that there is a close relationship between the two, as regards cause and effect. The germ exists not only in the urethra,

but also in the bladder and pelvis of the kidney when they have become infected.

DR. BRYSON said he is deeply interested in this subject, and is inclined to coincide with Dr. Bell's statements. We are not in a position to study the etiology of urethral fever until we differentiate urethral fever from urinary fever and other forms of febrile disturbance occurring during the course of manipulation in this region of the body. Urethral fever presents a clear clinical picture, characterized by a frank chill, a rapid rise in temperature, a flushed skin, quickly bedewed with perspiration, and then a drenching sweat and defervescence by crisis. The speaker said he did not think the urine had anything to do with the etiology of this fever. Dr. Fordyce stated in his paper that the bacterium coli was found in the bladder, yet we never see this form of fever follow severe operation on the upper urinary tract, such as cystotomy or nephrotomy, or after any operation in which there has not been some manipulation of the urethra. He would, therefore, limit the etiological field of this fever to the urethra. In his opinion, it is due to a chemical poison, for this reason, that it does not seem to have any power to reproduce itself in the blood. The reproduction of the poison seems to be limited to the urethral surface. He has seen cases of this fever immediately follow the introduction of a sound, while the instrument was still in the urethra, and where there was no reason to believe that there was any urine present.

DR. TAYLOR said he considered the difference between urinary and urethral fever to be simply one of degree: in the former the poisons are eliminated continuously, while in urethral fever they are eliminated only temporarily. The presence of the bacterium coli in the urethra in urethral fever has been proven by many observers. We have a good basis of facts to work upon, but it requires further investigation to prove the theory that these bacteria are the cause of the fever. It cannot be laid down as a law that the bacterium coli is the only one found in these cases; it may be associated with other micro-organisms, which find a suitable pasture-ground in different portions of the urinary tract.

DR. BRYSON said that in his opinion all those micro-organisms which produce an irritation, especially of the glands of Littre or the prostatic glands, may cause sepsis, or urethral fever, or urinary fever. He considers it very important that these different forms of fever should be differentiated from each other. We may have them combined. We may have a patient begin with urethral fever and end in sepsis. This fact was commented on by Banks and other observers years ago.

DR. LEWIS inquired whether Dr. Bryson excluded nervous shock in the production of a chill such as occasionally immediately follows the introduction of an instrument into the urethra?

DR. BRYSON said he entirely excluded the influence of the nervous system in these cases. We have shock produced without any urethral fever. We sometimes have shock produced to the extent of syncope without elevation of temperature.

DR. CHISHMORE said he wished to mention a clinical fact which seemed to him to be opposed to the bacterial origin of urethral fever. In some cases, every time you traverse the urethra with an instrument, the procedure is followed by chill, fever and sweating, while in those same cases if you make a perineal incision, thus inflicting much more damage on the urethra,

the operation is never followed by chill, etc. The operation has removed the element of tension. After such an operation the facilities for bacterial influence are very much greater, but it does not occur.

DR. CABOT said that the fact brought out by Dr. Chismore strengthens the belief in his mind that urethral fever is due to the influence of a poison : the reason it does not affect the system when there is free drainage, is because the poison is not forced into the tissues under pressure, but allowed to run freely by them. The reason why interference with the deep urethra is so prone to be followed by urethral fever is that that part of the urinary tract is exposed to greater pressure during the expulsion of the urine, especially in cases of stricture. The speaker said he feels quite convinced that urethral fever is due to a poison which is often contained in the urine ; it only remains to say how that poison gets into the urine, whether it is of bacterial origin, or secreted by the tissues. From the work of the bacteriologists in this line, he is inclined to think that the poison is supplied by the bacteria and not by the tissues.

DR. TAYLOR said it has always seemed to him that there is some little change in these cases in the urethral mucous membrane. It is sodden and hyperæmic, and is in a favorable condition for the rapid proliferation of the bacteria.

DR. BELL said he has never seen urethral fever follow operations upon the penile urethra in which free perineal drainage was instituted. There are, in his opinion, two essential factors in the development of the fever : one is wounding of the tissues, and the other is the presence of more or less urine.

DR. BRYSON said his experience does not correspond with Dr. Chismore in that we never have urethral fever after perineal urethrotomy. It has occurred in his practice. Dr. Watson, of Boston, has also reported such a case.

THE PRESIDENT stated that at the Altoona meeting of the Association he read a paper on the subject of cutting deep strictures of small calibre by internal urethrotomy. He performed this operation many times, and last Monday, for the first time in his experience, it was followed by urethral fever. The case was an exceedingly unpromising one ; the patient was 51 years old ; until two years ago he had been a hard drinker, and his urine had been dribbling for four years. Five minutes after the operation the man had a pronounced chill, followed in forty-eight hours by another. The temperature rose to 103.5. The man made a good recovery. There had been a good deal of hæmorrhage following the operation. The catheter had to be tied into the bladder, and the blood-clots, in accordance with Dr. Keyes' injunction, were not disturbed, so that for three days afterwards large crumbling clots came away in washing the bladder. The boric acid wash for the urethra was not used by this patient before the operation with the regularity that it should have been. Dr. Palmer said he will continue to do urethrotomy for deep strictures without the perineal operation. The above is the only case, out of 51 such operations, in which any untoward results followed.

The Rôle of the Posterior Urethra in Chronic Urethritis.—DR. BRANSFORD LEWIS, of St. Louis, read a paper on this subject. The conclusions drawn by the author were as follows :

1. The causes usually given for the prolongation of cases of clap (the presence or absence of gonococci ; strictures of large calibre ; the use of cer-

tain drugs in treatment, etc.) do not satisfactorily explain them, nor do they furnish reliable means for prognosticating the outcome of a case.

2. A single widely-prevalent cause for such prolongation of gonorrhœa has as yet not proved its right to recognition as such.

3. Posterior urethritis, by reason of its anatomical seclusion and inaccessibility to ordinarily prescribed treatment, if frequent, offers the best explanation for such prolongation or repeated recurrence.

4. Scrutinizing clinical investigation shows posterior urethritis to be present in the great majority of cases of prolonged or severe gonorrhœa, and

5. Direct topical treatment to the posterior urethra is therefore necessary in the great majority of cases.

6. The causes usually given as productive of posterior urethritis are not commonly found to be real factors in the clinic.

7. The mode of onset usually described does not coincide with that discerned in clinical observation.

8. These two latter observations confirm the probability that posterior urethral infection is accomplished through the lymphatics, which explains the frequency of such infection.

9. Posterior urethritis is not a complication but a natural phenomenon of gonorrhœa.

Some Studies on the Therapeutics of Acute Gonorrhœa.—DR. EDWARD MARTIN, of Philadelphia, read a paper on this subject, in which he detailed a series of clinical observations on the treatment of acute gonorrhœa. The author's conclusions were as follows :

1. The abortive treatment of gonorrhœa, by means of a ten per cent. silver-nitrate solution applied to the navicular fossa opening is advisable when the disease is seen in its earliest stage. That is, when inflammatory phenomena are absent and when the symptoms consist of the slight whitish discharge and tickling or moderate burning on urination, and when microscopic examination of the discharge shows that it is made up mainly of mucous and epithelium containing little pus. This abortive treatment is successful in an uncertain percentage of cases. When it fails it does not materially complicate the subsequent course of the disease.

2. When gonorrhœa is first seen in its florid stage, in addition to ordering rest, light diet, regular evacuation of the bowels, free drinking of plain water, hot baths on retiring, alkaline diuretics and the treatment appropriate to ardor urinæ and chordee, balsams should be given in full doses, and mild antiseptic irrigations or injections should be practiced at once. The most efficient balsams are sandalwood and copaiba. These should not be pushed to the point of disordering the stomach.

3. Irrigation of the urethra by means of hot antiseptic lotions gives better results than any other treatment. These irrigations should be continued either once or twice daily, until gonococci disappear from the discharge, or clap shreds. They should be replaced by astringent injections.

4. When irrigations cannot be employed, injections during the florid state should be of bichloride of mercury. 1-20,000, or silver nitrate, 1-10,000 or 1-15,000. These injections should be gradually strengthened until urethral tolerance is established.

5. The injections of silver nitrate, 1-3,000, or 1-6,000, or bichloride of mercury, 1-3,000, or the injection Brou, or any of the formulæ customarily

used in practice in the increasing or florid stage of gonorrhœa, distinctly predispose to the development of hyperacute or posterior urethritis, epididymitis and other complications of gonorrhœa, and may aggravate and prolong urethral inflammation. Strong astringent injections employed in the early period of the subsiding stage are equally dangerous.

6. Treatment by internal medication alone is followed by a small percentage of cases of epididymitis and posterior urethritis, but by slow cure. The most efficient treatment consists in the combination of the balsamic with local antiseptic treatment.

DR. TAYLOR said that the views expressed by Dr. Lewis in his paper regarding the rôle of the posterior urethra in chronic urethritis are to-day largely accepted and almost beyond controversy. A new epoch in the history of chronic gonorrhœa appeared with the publication of Jadassohn's admirable thesis on that subject, in which he divided the urethra into two parts, the anterior and the posterior, and based on that anatomical division, Guyon laid down dogmatic conclusions, of which this doctrine is the outcome. Then certain writers appeared who magnified the power of the compressor urethræ, claiming that that muscle kept up such a tonic contraction and so exanguinated the parts that the inflammatory process could not extend backwards. The first man who called attention to the fallacy of this theory was Aubert, whose observations, followed by those of Eraud showed that posterior urethritis existed in from 90 to 92 per cent. of the cases examined. Then attention was called to the fallibility of the so-called "two glass test." Dr. Taylor said he did not think that the infection in these cases is carried backwards through the lymphatics, because in this location they are not at all numerous; it is simply due to an extension of the gonorrhœal infection, the inflammation going from cell to cell. By means of the endoscope the inflammation can be seen extending backwards very rapidly. Contrary to the statement of Guyon, posterior urethritis should be regarded, not as a complication of the anterior inflammation, but as a mere anatomical extension of the disease. Another point mentioned by Dr. Lewis and first brought out by Bazy is that posterior urethritis of a low grade is apt to produce relapses of the disease. Many people do not seem to have a correct understanding of what gonorrhœa is. They call it a catarrhal inflammation, while on the contrary, it is an exudative inflammation. The gonococci start up the inflammation which becomes chronic by invading the sub-mucous connective tissue and there produces this round-celled infiltration. In posterior urethritis there is very often a congestion at the membranous junction and in the bulb. There may be no pus produced. Inflammation of the posterior urethra, as is well known, may occur after copulation and excesses of various kinds. When this happens the inflammation may extent downwards, producing a relapse of the symptoms in the anterior urethra. In such a case the process is originally an ascending one, and then a descending one.

One thing in connection with this subject must be borne in mind. We must not jump to the other extreme and say that in all cases of gonorrhœa there is inflammation of the posterior urethra. That is not the case.

As regards the treatment of gonorrhœa, Dr. Taylor said he agreed with the views expressed in Dr. Martin's paper. The balsam of copaiba and the oil of sandalwood are the best remedies for internal use. In the use of irrigating solutions, much care must be exercised. Solutions of sulphate of

zinc, 1-5,000 or 1-10,000, are probably just as beneficial as the solutions of bichloride of mercury. In speaking of the abortive treatment of gonorrhœa, which was recently revived by Diday, Dr. Taylor said the percentage of cures is probably much less than was first claimed for it. He regards a solution of permanganate of potash, 1-1,500 or 1-2,000, as equally good and less dangerous than strong solutions of silver nitrate as an abortive measure.

DR. MARTIN said he fully agrees with Dr. Taylor that only in a very small percentage of cases can acute gonorrhœa be aborted. They must be carefully selected cases. Out of seven cases in which he attempted to abort the disease, four were successful.

DR. LEWIS said he did not claim in his paper that posterior urethritis was the cause of prolonging clap in each case, but that it was instrumental in doing so in at least 90 per cent. of cases; this leaves 10 per cent. in which posterior inflammation does not occur. He would emphasize the statement made by Dr. Taylor that we must not, pendulum-like, swing to the other extreme of the question. If we accept this theory that posterior urethritis is the common factor in the prolongation of gonorrhœa, it will enable us to properly apply our remedies in the treatment of these cases. It is the proper application of the remedy, rather than the selection of this or that particular one, that will bring us success.

Instances of Late Secondary Manifestations of Syphilis in the Rectum.

—By DR. JAMES P. TUTTLE, of New York.

The author stated that the opinion that secondary lesions of syphilis occur within a given time after the appearance of the initial lesion is one that he considers no longer tenable, unless we make a time division of primary, secondary and tertiary. The ulcerative, desquamative, papular, copper-colored spots and other lesions assigned to this period appear so often at late periods from the time of inoculation, that we must either call them tertiary or admit that secondary lesions may occur at almost any time following the initial lesion. The majority of writers upon rectal diseases and upon syphilis hold that syphilitic ulceration is nearly always, if not always, tertiary, following stricture or broken-down gummata, or primary, which latter all concur in saying is very rare. If we limit the secondary manifestations to a time period, Dr. Tuttle said he should have to concur in these views; but if we accept the term as referring to the lesions usually succeeding the primary, the opinion could not be sustained.

The author then gave the histories of two cases illustrating the occurrence or recurrence of syphilitic ulcerative lesions in the rectum at a late period in the course of the disease. In the first case the patient stated that he had had a suspicious sore about fifteen years previously, for which he took mercury; he never saw any eruptive evidence of syphilis. The ulcer was situated just above the external sphincter, and made its appearance twelve years after the last possible opportunity of infection. In the second case the patient stated that he had had syphilis five years previously, for which he was treated for two years by an eminent specialist. The ulcer was situated on the posterior wall of the rectum; it was shallow, crater-like; its edges were clear-cut and markedly indurated. There was no stricture and no gumma or general thickening of the wall of the gut. Three weeks later a macular, copper-colored eruption appeared all over his trunk and legs, and on the border of the anus was a typical *plaque porcelanique*,

and also a small pearly patch just within the external sphincter.

In conclusion, Dr. Tuttle referred to the danger that is commonly supposed to attend operations about the penis or rectum in syphilitic subjects. Both Fournier and Ricord have reported disastrous results following such operations.

DR. TAYLOR said we must not lose sight of the fact that numerous lesions may occur in syphilitic subjects which are not syphilitic lesions. They are due to microbic infection. In the first case referred to by Dr. Tuttle the ulcer in the rectum may have had no connection with the suspicious sore the man had fifteen years before. This may also have been so in the second case, because we know that syphilis is not very prone to attack the rectum. Recorded cases of lesions of the rectum of a hyperplastic character in syphilis are not numerous. As regards the question of operating on syphilitic subjects, the point is simply this, that in syphilitics the tissues are more vulnerable than in non-syphilitics. With rigorous asepsis and efficient internal treatment, wounds in syphilitic subjects heal up equally as well as in patients not so affected. The fatal cases of Fournier and Ricord occurred in pre-antiseptic days.

The following officers were elected for the ensuing year :

President—Dr. George Chismore, of San Francisco.

Vice-President—Dr. L. Bolton Bangs, of New York.

Secretary and Treasurer—Dr. John A. Fordyce, of New York.

Member of the Council-at-Large—Dr. R. W. Taylor, of New York.

The next meeting of the Association will be held at Washington, D. C., in May, 1894.

NEW YORK DERMATOLOGICAL SOCIETY.

224TH REGULAR MEETING.

DR. ELLIOT, *President, in the Chair.*

Case of Scrofulous Gummata.—DR. FORDYCE presented an anæmic girl, aged 20, who came of a tuberculous family. Over the lower extremities she had a number of subcutaneous lesions which, on first view, strongly suggested syphilitic gummata. A few of them had broken down and were discharging curdy pus; others were semi-fluctuating, while a few were quite hard and covered by healthy epidermis. In order to render the diagnosis certain, she had been given the iodide of potassium. Under the use of this drug the lesions became inflamed and the ulceration extended. The iodide was stopped and the lesions were treated locally by iodoform, in connection with tonics and cod-liver oil. A marked improvement in her local and general condition was soon apparent.

DR. ALLEN concurred in the diagnosis.

DR. KLOTZ remarked that the bright red color of the nodes of the skin in the case did not suggest scrofulous gummata, which usually appeared almost pale or of a more bluish color, but looked more like erythema nodosum. The fact, however, that some of the nodes contained pus, and on breaking down had left characteristic ulcers, did not allow of any doubt of the correctness of the diagnosis.

DR. FORDYCE stated that the bright color of the nodes had appeared only since the patient had commenced to take iodine of potassium; before they had been almost white. The girl comes from a tuberculous family, and shows other symptoms of inherited disease.

Case for Diagnosis (Syphilis or Erythema Multiforme).—DR. KLOTZ presented a boy, 13 years of age, with the following history: About two weeks ago he began to complain of pain and stiffness in the legs, particularly of the muscles of the calves. One week ago the pains had become more severe and more general, and an eruption had appeared on the thorax and around the knees. The eruption on the chest, when first seen, consisted of vesicles with serous contents, which soon began to dry and formed crusts. When first seen, four days ago, the chest and back were covered with numerous groups of small lesions, pointed or broader papules covered with scales or thin crusts being prevalent, with small pustules interspersed; the grouping of the papules resembled that of herpes, some of the patches showing distinct annular outlines. Around the knees and on the lower legs the lesions were of different character—solitary, flat, pea-sized papules of a bright red color, which did not disappear on pressure, with smooth surface, except in the center, where a small loosely adherent crust or a superficial loss of substance was noticed. The affection does not cause any pain or itching. The father of the patient supplemented the history by reporting that about ten months ago a swelling appeared in front of the left ear, and soon after a small tumor was discovered on the lower eyelid of the same side, which were both removed at an eye clinic. Since that time the boy had not been in good health, but no previous skin affection had been observed.

DR. MORROW considered the case as unquestionably one of syphilis, the shape of the lesions and the figuration of the groups being very characteristic of a late relapsing syphilide.

DR. FORDYCE did not doubt the syphilitic nature of the affection; the seat of the initial lesion having probably been the eyelid.

DR. ALLEN thought the case had the appearance of a syphilitic eruption in a strumous person.

DR. ROBINSON considered the case one of syphilis.

DR. KLOTZ said he had first been shown only the lesions around the knees, which, together with the severe pains in the calves—certainly not a symptom common in syphilis—had suggested the erythematous nature of the eruption of rheumatic origin. The lesions on the chest and back had immediately impressed him as characteristic of syphilis; he had, however, not been able to obtain a history of an initial lesion or previous secondary symptoms until the report of the father of the patient to-night revealed the probable infection from the eyelid. In regard to the lesions on the lower extremities, he was still inclined to consider them of rheumatic origin.

Case of Ringworm of the Mucous Membrane of the Lip.—Presented by DR. ROBINSON.

The patient, a young man, showed a patch of ringworm extending upon the mucous membrane of the lips as far as the line of contact when the lips were slightly brought together. It was present in both the upper and the lower lip.

DR. CUTLER said he was especially interested in the case, as he had recently treated a young man in private practice for ringworm of the face

and neck, where one of the lesions had extended from the lip into the mucous membrane of the mouth. As ringworm affecting mucous surfaces was so rare a disease, even stated by some authors as never occurring, he had intended to report the case.

DR. SHERWELL had never before seen ringworm on the mucous membrane of the lips, but he had seen in sycosis parasitaria the process running up into the mucous membrane of the nostrils, or at least it had so appeared to him clinically.

DR. ALLEN spoke of the possibility of molluscum contagiosum occurring upon the vermillion border, as instanced in a case of his own, and saw no reason why trichophytosis might not do the same.

DR. ROBINSON said that he had presented the case on account of its seat on a mucous membrane, where there did not exist any corneous cells; it seemed, therefore, that here the elements of the trichophyton had lived in cells, the majority of which still had a nucleus and in a part to be regarded as composed of living tissue; hence the trichophyton fungus can live in living tissue, as maintained by himself several years ago.

DR. SHERWELL, in confirmation of his previous remarks, said that he had frequently seen favus develop on spots where there was no epidermis at all.

DR. LUSTGARTEN had never seen a case of trichophytosis on a mucous membrane.

DR. ELLIOT would ask, in connection with this case, whether any one of the members present had observed those cases of ringworm of the palms and soles which closely resembled syphilitic eruptions? Zambaco had pointed out numerous cases in the Hôpital St. Louis, which had been regarded as syphilitic affections and had been unsuccessfully treated, but in which he had demonstrated the trichophyton, and they had healed rapidly under antiparasitic treatment with chrysarobin and resorcin. He himself had observed such cases, which did not improve under mixed treatment. He had found the spores and mycelia of the trichophyton in the scales, and the lesions healed speedily under antiparasitic treatment.

Case of Rodent Ulcer or Superficial Epithelioma of the Chest, Ear and Forehead.—Presented by Dr. Fox.

The lesions occurred in a robust man of 56 years of age, upon the forehead, above the ear and over the sternal region, and were of ten years' standing. Above and behind the right ear there was a large granulating patch covered with a thick crust. Upon the sternal region was a large circular patch with a defined outline and scalloped border, the margin of the patch presenting a fine indurated white ridge enclosing cicatricial tissue.

Itching, which was confined to the chest, was very great, so much so that the patient found the disease almost unbearable, especially in warm weather.

DR. ALLEN had no doubt of the correctness of the diagnosis. The situation on the sternal region was quite unusual. He considers rodent ulcer and epithelioma as histologically identical, but clinically different.

DR. PIFFARD was glad to see the name of rodent ulcer abolished, because it could be applied to three different affections, namely, to certain forms of ulcerating syphilides, to a carcinomatous affection and to certain forms of lupus. The existence of the latter form of disease had generally been denied, but always maintained by himself. Tubercle bacilli had never

been found in such cases until Leloir had published a case in his book on tuberculosis.

DR. JACKSON had seen a case of epithelioma of the chest and neck following patches of chronic psoriasis, which had been in the Skin and Cancer Hospital, in Dr. Fox's service, seven or eight years ago, but the location was certainly a rare one.

DR. ELLIOT would agree with Dr. Piffard that the name of rodent ulcer ought to be abolished. The distinction between epithelioma and rodent ulcer was only a clinical one, but histologically they both represented a typical epithelial growth. They were both epithelioma, though different degrees of the same process, and he could not understand the advantage to be gained from retaining a name which meant nothing distinctive, pathologically or histologically, from the general term of epithelioma.

DR. KLOTZ said that the clinical difference was of sufficient importance, particularly in regard to prognosis, to make the application of different names advisable. He did not favor the use of a name like epithelioma, which suggests a rather pernicious character for lesions of such benign course as the rodent ulcer generally represents.

DR. LUSTGARTEN was of the opinion that a special name should be retained for the superficial epithelioma. He held that every clinical picture demanded its proper name, irrespective of its histological structure. The prognosis was greatly different according to the clinical features. Identity of the pathological appearance did not prove identity of the disease. The same thing occurred in tuberculosis, where lupus, tuberculosis verrucosa and the true tuberculous ulcer, in spite of the similarity of the histological conditions, differed widely in their clinical appearance and in regard to the prognosis.

DR. FOX said that from the clinical standpoint he would like to see the name of rodent ulcer abolished, because it was applicable to different affections. It was true that these cases generally remained superficial, but some eat quite deeply into the tissue. In the present case, he thought that the lesion on the chest might remain ten or even twenty years without changing the character, while that on the ear would destroy tissue, and possibly life, within an earlier period. The name of epithelioma might include all these lesions. Their present character was superficial, but that might be changed at any time.

DR. PIFFARD said, in regard to the case published by himself, that none of the features of epithelioma could be found under the microscope, no epithelial pearls, no processus protruding from the rete; still, the main lesion presented clinical features, after twelve or fifteen years' existence, which every surgeon would pronounce the case an epithelioma. He had observed another ulcer, which Dr. Fordyce had also seen, which looked exactly like epithelioma, but where the microscope did not show the conditions of the disease. The whole question was exceedingly mixed up and ought to be studied anew.

DR. ELLIOT could not agree with Dr. Lustgarten on the retention of the name of rodent ulcer, because he believed that both it and epithelioma were forms of the same disease. The fact that rodent ulcer ran a slow course, could remain without producing any grave symptoms for years, was more readily cured and did not relapse so usually, would not, in his opinion, constitute it a distinct process nor give warrant for its not being designated

as epithelioma. He would mention a case reported by Dr. D. Lewis, in which a superficial epithelial lesion remained almost without extension for seventeen years, and then suddenly started up into active progression and rapid extension. He had himself observed a similar case, where the epithelioma had originally developed upon a syphilitic scar.

The question of the site of the development was, in his opinion, not sufficient for differentiation between a rodent ulcer and epithelioma, or for dubbing them with different names. In the opinion of some writers, the former originated from hair follicles, etc., alone, and the latter from the rete. Yet they were both epithelial tissues, and it would appear to him to be a most artificial and burdensome separation to make between two clinical pictures of malignant epithelial growth.

DR. ROBINSON agreed with Dr. Lustgarten that rodent ulcer is not necessarily the same disease as epithelioma because the anatomical structure appeared similar; the diagnosis was often very difficult, and although the microscopical character is usually regarded as like that of ordinary epithelioma, yet some observers, as Dr. Thin, of London, and several others, consider they have special microscopical as well as clinical character. He was in favor of retaining the name until we knew more about the etiology, and, perhaps, even if it really were an epithelioma, just the same as he favored the old name of lupus, etc., in tuberculous affections of the skin.

DR. SHERWELL called attention to another superficial form of epithelioma in old people, characterized by heaping up of epithelial scales concomitant of the atrophy. This, on being removed, erosions would be found underneath, and he believed sometimes developed into the malignant form of epithelioma. He had observed this same form in a very superficial condition on the penis as well as elsewhere.

DR. TAYLOR mentioned, from his experience, that three patients, old men, appeared at the clinic, within six months, with warty growths in the face, suspected to be epithelioma. In all three cases the microscope showed only uncomplicated inflammatory processes, without any suspicious appearance.

DR. PIFFARD called attention to Wagner's case of hypertrophic acne rosacea, as an example how the diagnosis of epithelioma was often made after a hasty microscopical examination. In this case he hardened about 400 grains of tissue and made sections in different directions. Those taken transversely near the surface showed portions which had exactly the appearance of epithelial pearls, but really were sections of the ducts of the sebaceous glands.

DR. ELLIOT stated that he considered it very inadvisable to use distinctive names for every clinical phase of a cutaneous process. The term "rodent ulcer" meant really nothing and could be applied to any ulcer on the surface, whether tuberculous, syphilitic or of other origin, and he, therefore, could see no advantage to be obtained by its retention. If we also made a distinction between phases of a disease upon histological grounds, then we would have to accept a multitude of names to express each different histological picture met with. He had seen epitheliomata with, for instance, scarcely any pearls, and others which consisted almost exclusively of these bodies. In his opinion the division of pathological processes upon such grounds would be productive of confusion.

DR. KLOTZ remarked that he could not consider the cases referred to before by Dr. Elliot as affording any proof of the identity of both affections, but rather of the difference between them, since epithelioma developed on all kinds of scars, on psoriatic patches, etc.

Case of Lichen Planus.—DR. ALLEN presented a case which illustrated the prompt effect at times obtained from the use of Unna's bichloride of mercury and carbolic acid ointment. The patient, a man of 27, had the first signs of eruptions two months ago, coming under treatment on March 8th. After two weeks' treatment all the larger lesions in the flexures and inner surface of the thigh had almost wholly disappeared while the newer papules had become quite flattened and the itching was no longer troublesome.

DR. LUSTGARTEN did not consider these acute generalized cases a good test for any treatment, because they have a great tendency to disappear voluntarily. He had himself not seen much effect from Unna's ointment.

DR. MORROW thought that the generalized distribution of the lesions was unusual. He would be interested to hear of the experience of the members of the Society with the treatment with Unna's salve.

DR. FORDYCE found that under Unna's treatment in some cases the lesions disappeared, while in others they were but little affected. He had, on the whole, obtained better results with it than with any other application.

DR. ROBINSON has not seen any specially good results from Unna's ointment in the few cases in which he had used it.

DR. SHERWELL remarked that almost every drug had been applied to cases of lichen planus with more or less apparent good results; there seemed to exist no really specific remedy. He did, however, believe that antiarthritic remedies were useful in a majority of cases.

DR. JACKSON had satisfactory results in a number of cases. It is always interesting to note the different results different men obtain from the same remedies.

DR. FOX said that Unna's treatment had been the subject of much discussion. He agreed with Dr. Lustgarten about the spontaneous disappearance of the eruption in the generalized cases; the old patches were very obstinate, some were benefited by Unna's ointment or by carbolic acid or the bichloride of mercury alone, in others no effect at all became visible. He mentioned that he had recently seen an extended lichen planus on the back of a negro, which, on account of the gray and almost white appearance of the patches, resembled a papular syphilide.

DR. MORROW saw extraordinary results from Unna's salve in a number of cases; in one particular case he used Unna's ointment on one leg and salicylated plaster on the other one, when the plaster seemed to give a more satisfactory result.

DR. KLOTZ had also observed the spontaneous disappearance of the generalized lesions of lichen planus and had stated so at a previous meeting. He had seen good results from Unna's ointment in a number of cases, but in some it had to be given up on account of the decidedly irritating effects.

DR. ELLIOT had observed most excellent results in lichen planus from the ointment recommended by Unna. It had really failed in only one case, one of sixteen years' duration of the hypertrophic form. He thought the failures could be attributed to the use of the ointment always in the same strength upon all cases alike, instead of grading the quantity of the bichlo-

ride of mercury in accordance with the effects produced. One would begin with gr. ii to $\bar{5}$ j, and in some instances it would be necessary to increase it to gr. x to xv and even more. He had not yet found it necessary to use any other application for lichen planus.

Case of Ichthyosis and Atrophic Striæ in a case of Hodgkin's Disease. DR. TAYLOR presented a patient, John M., 25 years, a native of Scotland, a fish-pole maker by trade. About six months ago the lymphatic glands began to swell, first in the neck, later in the axillary region and under the pectoral muscle. He had never had a glandular swelling before that time nor other sickness of any kind. The swollen glands are neither tender nor painful. No one else in his family has ever had a similar disease.

At present large masses composed of swollen glands are found in each axilla, at the base of the neck on left side, under the pectoral muscle of each side projecting from under the clavícula. Smaller masses are present in the neck behind the sterno-mastoid muscle.

About the same time the glands began to swell the skin began to dry, and became hard and scaly, later it began to show brownish streaks, especially over the abdomen. The skin had never previously been affected, nor can the patient remember any similar disease in his family excepting the case of a nephew, a young man of twenty years, who had a dry and harsh condition of the skin when about fourteen years old. It has since then entirely disappeared again.

Patient has been under arsenic treatment since entering Bellevue Hospital on March 21st. Some of the glands have somewhat decreased in size. General condition of patient is good.

DR. MORROW considered the case a very interesting one; at the first glance he thought that the condition might be due to the administration of arsenic until he learned that the drug had been given only for a short time. He regarded true ichthyosis as a developmental disease, it was never acquired at so late an age.

The ichthyosiform condition of the skin on some portions resembled the Kava skin; the resorption of the fat from the sub-cutaneous tissue from the use of Kava was remarkable. The skin would become dry and exfoliate to a certain degree, but would not become so distinctly ichthyotic. The atrophic striæ were also interesting features.

DR. PIFFARD said that the interesting features of the case were first the late development of xeroderma, and second the atrophic striæ, which he considered due to stretching of the skin by the extension of the abdominal cavity; he thought that the patient had probably enlargement of the liver.

DR. ALLEN had been of the opinion that ichthyosis was always congenital, he had lately, however seen a case, in which it was said by the patient to have developed only within later years.

The striæ atrophicæ were not in places where stretching of the skin would account for their existence. In this case it would seem that a low grade of ichthyosis had previously existed, but was not noticed until after the appearance of the swelling of the glands.

DR. FOX considered the case one of pityriasis resulting from the atrophic condition of the sub-cutaneous tissue, secondary to another morbid process. The atrophic striæ were generally due to some mechanical cause, but here they seemed to have occurred spontaneously.

DR. JACKSON did not consider the case one of true ichthyosis but shared the opinion of Dr. Fox.

DR. ROBINSON thought the affection was not ichthyosis proper but an ichthyotic condition of the skin having a different etiology and not to be regarded as a physiological condition of that particular skin.

DR. SHERWELL said, that possibly the condition of atrophic striæ might be accounted for by coagulation of lymph in the spaces and consequent tearing, as it were, of the skin over them on exertions; this was, to be sure, not in the line of natural cleavage of the skin, but it was in the direction of the muscle cleavage lying underneath, to which the skin was or had been tightly adherent. This case did not correspond with one of lymphangioma generale he had seen on trunk and to a moderate extent on limbs. In this particular case seen years ago, the individual was by the hardening of lymph in its channels and by induration and agglomeration of the glands almost in the state of one cuirassed, still he did not remember to have noticed any condition of atrophic lines like those here present.

DR. LUSTGARTEN considered the affection as a dystrophy due to Hodgkin's disease, a kind of pityriasis tabescentium. The atrophic striæ were due to the atrophic condition of the skin in consequence of which it would give way more easily to any extending force from behind. He thought that there were certainly some visceral lesions present like pseudo-leucæmic affection of liver, spleen, or probably the lymphatic apparatus of the abdominal cavity.

DR. ELLIOT agreed with Dr. Lustgarten, that the condition was a kind of cecotrophia of the skin similar to tabescentium, but not a true ichthyosis, which always was a congenital malformation of the skin and not a disease.

DR. FOX asked if anybody had seen similar conditions of the skin in other cases as Hodgkin's disease.

DR. CUTLER stated, that in sixteen cases of Hodgkin's disease, which had come under his observation, he had never found atrophic striæ, only moderately dry skin.

DR. TAYLOR said, that he had seen the case but hurriedly and at first sight had thought of ichthyosis, although it seemed unusual to find it at so late an age and so generally distributed. He agreed now with the opinion that it was a case of ichthyotic condition of the skin symptomatic of general disease. The atrophic lines represented tears of the tissue due to the loss of integrity of the structure of the skin and to pressure from within.

The Secretary, DR. KLOTZ, reported that at the request of the Society he had received from Dr. Sabouraud of the Hospital St. Louis, in Paris, a number of specimens of the trichophyton microsporon and megalosporon comprising cultures and microscopical sections, which he laid before the Society.

On motion of Dr. Piffard a note of thanks was tendered to Dr. Sabouraud to be transmitted to him by the Secretary, and a Committee was appointed to examine the specimens and to report on them at a future meeting. The President appointed Drs. Piffard, Fordyce and Lustgarten as the committee.

DR. FOX presented photographs on glass and paper illustrating folliculitis decalvans.

DR. ALLEN showed a new instrument for the removal of comedos; it

has the shape of a cilia forceps and is intended to remove the comedo by lateral pressure, a bar preventing the skin from being squeezed by too much force being exerted.

Correspondence.

DERMATOLOGY AND SYPHILOGRAPHY IN FRANCE.

The Atrophic Alopecias.—In 1889 I communicated the *résumé* of my observations upon the atrophic alopecias which I have named *folliculites décalvantes*. In spite of the publications of Drs. Besnier and Quinquaud in France, and of Drs. Ducrey and Stanziale, in Italy, upon the same question, it appears that these new views have been very cautiously accepted abroad. Thus, it is only recently that one of the most eminent dermatologists of America has seemed to say in a memoir that these descriptions rested solely upon errors of diagnosis. I can assure the gentleman that this opinion is inexact, and I am sure that in a little time when he has come to observe typical instances of these affections, he will be the first to see that he has been deceived in holding such an opinion. However this may be, here is still another French Dermatologist, and one of no little note, Professor Dubreuilh, of Bordeaux, whose activity and talent have resulted in making his city an important Dermatological center, here, I say, Professor Dubreuilh has just fully confirmed my work in this field. This author publishes four pre-edited observations bearing upon the form which I have described under the title of pseudo pelade, and which is characterized by the appearance of a light, rosy redness about the hair, and furthermore by the definite atrophy of the hair-bulb and formation of irregular bald plaques of greater or less extent, over which the skin is white, smooth, ivory-like, of atrophic aspect rather than cicatricial. The affected hairs when pulled out show a coarse white sheath, like the hairs of favus. It is useless to add that all bacteriological examinations which have been made have demonstrated the complete and constant absence of trichophyton and achorion. Dr. Dubreuilh has not observed instances belonging to the acne decalvans of Lailier or to the *folliculite dépilante* of Quinquaud. The affection which constitutes my second form of *folliculites décalvantes*, it appears even that he, too, on his part, throws a certain doubt upon the security of the diagnosis advanced by the authors who have described this variety, so true is it that when one has not himself seen a disease, he is always tempted to suspect its existence. Let him be reassured!

Quite recently we have observed at the polyclinic of La Rochefoucauld a case of *acné décalvante*, which was very typical in a young girl of fourteen. There were several points of attack upon which alopecia had already occurred. Surrounding these small bald plaques could be seen with the greatest clearness the occurrence of elements of acne-like aspect, beginning first by a sort of deep induration perceptible to the touch. Then the skin became tumefied, reddened, and there formed a sort of papulo-tubercle, which slowly suppurated in the center, opened and gave issue to pus, which formed a little crust. The lesion was, in fact, wholly comparable to that of the affection which I described for the first time in 1890, under the name of disseminated

symmetricial folliculitis with tendency to cicatricial formation, and which is seen upon smooth regions. I sent this young patient to my friend, Dr. Sabouraud, whose ability in bacteriology is known to all, and he could discover, in this case, neither trichophyton nor achorion, but a microbe of quite special appearance, which resides especially in the thick sheath surrounding the roots of the affected hairs. I should add I employed in this case preparations of sulphur, naphthol, and resorcin with complete success.

Dr. Dubreuilh is on the other hand quite affirmative in regard to the existence of my third form of folliculitis decalvans; that to which I gave the name lupoid sycosis, and which has since my observations appeared, been described by Unna and Sach under the name of *ulerethema sycosiforme*. It must be remarked in this connection that between the first type (pseudo-pelade) and the third there is a whole series of intermediary forms which can be added to the one or the other.

Besides, Ducrey and Stanziale have shown that the anatomical lesions are nearly identical in the cases which approach the sycosis, and in those which simulate alopecia. In all these cases we find diffuse inflammatory lesions surrounding the follicles which are scarcely appreciable. The process ends in a complete atrophy of the papillæ, the hair follicles, sebaceous glands and even the sudoriparous glands. Indeed these two morbid forms have in their evolution and histological changes many points of similarity with lupus erythematosus. However, the clinical aspect does not in any way permit an idea of the identity of those dermatoses.

Treatment of the Tineas.—The question of the treatment of the tineas continues to engage much attention in France. Scarcely a month passes one might say without the appearance of a fresh communication on the subject.

Dr. Hallopeau advises at the present time for the cure of alopecia areata frictions with essence of wintergreen with the addition of equal parts of ether. In this strength and under this form the essence of wintergreen is in no wise irritant, provoking neither pain nor redness of the tissues and gives off a pleasant odor. It thus presents all advantages. It has given remarkable results in the author's hands and has seemed to him much more efficacious than the essence of Chinese cannella. This substance seems to act only by its parasiticide qualities which are well known; which proves that we can arrest the extensive spread of alopecia and cure it by simple parasiticides, that the irritant effect is not indispensable in order to obtain these results contrary to the view of very many authors.

Dr. Butte in a very interesting work has given precision to the indications for iodized collodion in the tineas. In alopecia, iodized collodion does not seem to him to be effective except in the achromatic forms, and where there still exist only a few patches of alopecia sharply limited in extensive alopecias of long standing in the form of alopecia decalvans, its action does not seem to him superior to that of the ordinary forms of treatment. He thinks that frictions twice a day with oil of cade succeed in general better in all cases, of alopecia without exception. Dr. Butte recommends especially the use of iodized collodion in tinea tonsurans. This is what he says: "In all cases where epilation is judged necessary several layers of the following preparation is to be spread over the plaques of trichophytosis extending at the least a centimeter over the healthy border:

R Alcohol at 95°	gram 12.
Metallic Iodine	centig. .75
Dissolve and add Collodion	gram, 35.
Venice Turpentine	" 1.50
Castor oil	" 2.

"We can also employ the following formula:

R Alcohol at 95°	
Ether	aa gram 5.
Metallic Iodine	centig. .50
Collodion	gram 30.

"During the following four or five days this application is made daily until the layer is quite thick, adhering closely, and presenting no longer any cracking."

After a fortnight the margin of the coating is raised up and the hairs to which it adheres are cut with scissors and then the whole is pulled off with the fingers. That part of the coating which was in contact with the scalp is found covered with a great quantity of little hairs which adhere closely to it. The plaque of trichophyton is then washed with solution of sublimate, one to five hundred. There is then to be applied an ordinary dressing and at times we obtain cures without the need of going back to a second course of the iodized collodion. Dr. Hallopeau employs, also, the iodized collodion, one in thirty, in tinea tonsurans. He applies it during four days in succession then for three days he puts on vaseline and so in suite.

It is well to recall that for a long time the same author has advised for tinea tonsurans constant applications upon the scalp of iodized vaseline, one to a hundred.

Dr. Augagneur of Lyon has quite an original idea, but which it is permitted, until more ample information is forthcoming, to suspect of not being well founded in a practical sense.

Having noticed that trichophyton tonsurans can no longer vegetate upon the scalp of adults, he has conceived the idea that by the injection of testicular fluid according to Brown-Sequard's process an artificial puberty could be created in infancy. He has carried out a series of such injections in sickly infants affected with tinea and has thought to have noticed that the condition of the scalp has often improved at the same time as their general condition.

Treatment of Cutaneous Trophoneuroses by Sequardian Injections.—Another application which has been made of injections of testicular juice in cutaneous pathology is that which Dr. Monnet has just proposed in certain trophoneuroses. In a young girl of very nervous disposition affected with symmetrical vitiligo of the trunk and lower extremities he instituted a unique medication composed of injections of testicular fluid. In spite of some inflammatory accidents which complicated the first injections, he persisted and during six weeks injected morning and night three cubic centimeters of this liquid. Under the influence of this treatment the general condition improved and the achromic tint of the decolorized parts became gradually less. At the end of three months the vitiligo had almost wholly disappeared. The author cites in his Memoir, among the subjects affected with rebellious dermatoses which he has happily modified by this method,

three cases of ichthyosis, fourteen instances of neuropathic eczema, several cases of trophoneurotic erythema (we must be permitted to note the vagueness of this term), and several cases of bullous and vesicular eruptions in hemiplegics or subjects of general paralysis. He observes that we should not consider this treatment as one of empiricism. In all cases of cutaneous trophoneuroses it is the nervous system which is the cause; the first origin of the affection, hence it is this we must strive to modify, and we arrive directly at this point of the injections of testicular fluid. According to the author, injections of cerebrine are preferable in these cases (It is well to mention these attempts which are at least curious—but we can as yet neither approve nor recommend them. We do not know exactly the effects produced by injections of these fluids into the organism, the results obtained are as yet very contradictory, but we cannot deny that the idea on which rest the attempts of Dr. Monnet are both logical and perfectly rational).

Abortive Treatment of Buboes.—It is well known that Welander, of Stockholm, has proposed to abort buboes by injecting into the beginning bubo and into the tissues about it a solution of benzoate of mercury, in strength of one to one hundred. He injected a cubic centimeter of this solution, and then applied a compressing dressing. The first day the patient experienced quite lively pain; the succeeding days the injected parts became swollen and then diminished in volume, and resolution took place after a period of three weeks. Drs. Brousse and Bothezat, of Montpellier, have again taken up these experiments, but they have thought it useful, in order to well appreciate the value of this method, to pick out cases in which the pain, the inflammation and the size of the gland affected prove that there is danger of suppuration. On the other hand, they have not experimented with patients in whom suppuration had already begun.

They have thus only been able to collect ten cases, but all picked ones, and hence not possessing a great value from the point of view of exact appreciation of the efficacy of the method. They employed the solution recommended by Welander (benzoate of mercury 1 grain, chloride of sodium 30 centigrams, distilled water 100 grains). After rendering the region aseptic (shaving, washing with soap, ether and sublimate solution), as well as the instruments and hands, they injected half a syringe of the solution into each extremity of the gland. They then applied a sublimate compress and a compressing bandage, either with cotton or with a caoutchouc band, but of the ten cases thus treated they had only one successful result. In all the others the evolution into suppuration continued, and they were obliged to incise. Only one case became chancreoid; the other buboes were not virulent, and hence should have been favorably influenced by the method. In all their patients the injections were followed by a state of malaise very pronounced, cephalalgia, nausea, depression and raised temperature. The authors, therefore, do not believe in the efficacy of the procedure called by the name of Welander.

Ocular Syphilis and its Treatment.—According to Dr. Chibret the best method of general treatment of ocular syphilis consists in hypodermic injections of soluble mercurial salts and in particular the cyanide of mercury, the syphilitic lesions of the cornea and of the conjunctiva are very favorably influenced by the sub-conjunctival injections of soluble mercurial prepara-

tions while syphilitic lesions of the iris remain obstinate to this local treatment. The iodide of potassium has, according to this author, no effect upon syphilitic lesions of the eye.

Professor Panas employs in syphilitic affections of the eye injections of biniodide of mercury incorporated in olive oil. To obtain this product the virgin or superfine olive oil is first subjected to washing with alcohol. For this purpose one mixes three hundred parts of alcohol at 95° with one thousand parts of olive oil and this is to be shaken from time to time during four or five days, when the alcohol floating on top is decanted, the oil is then raised to a temperature of 110° to 115° and kept at this for ten minutes, care being taken not to go above this temperature for otherwise a partial decomposition would take place in the oil, the oil is then cooled and when the temperature has descended to about 65° biniodide of mercury is to be added little by little in proportion of forty centigrams for a hundred cubic centimeters of oil, stirring with the thermometer which is left in for the purpose of constantly watching the temperature. When the biniodide of mercury is dissolved it is filtered through sterile cotton and gathered in sterile bottles. This solution contains four milligrams for each Pravaz syringe full; it is very stable if preserved in yellow colored bottles.

Dr. Galewski treats separation of the retina in syphilitics by daily frictions each evening over an articulation with two grams of double strength mercurial ointment. Each day a new articulation is acted upon which permits returning to the same part only every ten days. From time to time the treatment is interrupted for ten or fifteen days but as rarely as possible.

Two complete years of frictions are required to reach a good result and the whole success of the treatment depends upon its long duration. The author employs the same procedure against the syphilitic paralyses of the motor nerves of the eye.

Paris.

L. BROCCQ.

IS CANCER INFECTIOUS?

To the Editor of the JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES:

In an article recently published in the *British Medical Journal*, it was stated that carcinoma seemed to be an endemic disease. In support of this view the following cases are cited:

In a farm house, known to the writer, four deaths from cancer have occurred within the last forty years, as follows:

Case I. In 1852, Mrs. B. M., aged 49 years, cancer of intestines.

Case II. In 1860, R. K. M. (son of Case I), aged 33, cancer of nose, tongue, throat and lungs (so reported).

Case III. In 1860, Mrs. R. K. M. (widow of Case II), aged 45, cancer of uterus.

Case IV. In 1882 B. M. (former husband of Case I), aged 87, epithelioma of lip.

To these might be added Case V. In 1846, Mrs. A. K. M. (mother of Case IV), aged 76, cancer of stomach. She had lived the most of her married life in this house, and although moving away seven years before her death, had made frequent long visits there.

It will be seen that three distinct families are represented here, those of Case IV, his wife and son's wife.

It is also noteworthy that while there was a family history of cancer in each case, yet in branches of these same families, living elsewhere, no death from cancer is known to the writer to have occurred in the last half century.

Respectfully

HELEN BALDWIN, M.D.

South Canterbury, Conn.

Book Reviews.

Transactions of the American Dermatological Association. Sixteenth Annual Meeting.

The transactions consist of reprints from this JOURNAL of all the principal papers read at the meeting in New London in September last, with the colored plates and photographs, which served to illustrate their principal features at the date of publication. The discussion of each by the Association members follows the contribution. The paper and type are the same as used in the JOURNAL and the size of the volume, most convenient for reference. It is a production which reflects much credit on the Association and its Secretary.

Psychopathia Sexualis, a Medico-legal Study. By R. VON KRAFFT-EBING.

Translated by C. E. CHADDOCK, M.D. Philadelphia: The F. A. Davis Co., Publishers.

This book has for long been known to students of psychiatry and psychology, and to those interested in pornography. For such students it is the most thorough and replete in details of the books bearing on this subject. In fact it may be said that this work of Krafft-Ebing including as it does, a large portion of his "Neuen Forschungen," has been the inspiration of a considerable literature on perverted sexuality within the past few years.

It is not alone students belonging to the Teutonic race who have been familiar with this work, but the English-speaking, the French-speaking and the Italian-speaking as well. The book in itself is no small contribution to the realm of perverted psychology. It is of value to the Jurist, to the Neurologist and to the Psychiatrist. To all these it is accessible in the language of its author. The necessity for the translation of such a book into English is not apparent. Reasoning from the fact that seven large editions had been exhausted in Germany within a few years, it might be said financial, more than scientific motives, prompted such publication. The translator justifies his task—which by the way has been well done—by giving a long quotation from Schrenck-Notzing, a well-known follower of Krafft-Ebing, who seeks to justify the publication of such details of perversion of the sexual instinct apart from their proper place in psychiatry. Although we are not concerned with its publication in the German tongue we must say that the arguments advanced by Schrenck-Notzing are not at all convincing. He says, that the extremely large sale of the book can be explained only by the fact that it is purchased by the general public. "But,"

he says, "in spite of this disadvantage, the injury done by implanting knowledge of sexual pathology in unqualified persons is not to be compared with the good accomplished." This is false in sentiment and false in reasoning. The vulgar public have far less capacity for understanding sexual pathology than they have for understanding the pathology of bodily disease. The intricacy of the bodily structure is not to be compared with the intricacy of the mind. Why then should one be supposed capable of understanding and considering intelligently perverted psychology when they are incapable of grasping perverted physiology? A book filled *ad nauseam*, with autobiographical details as this one is, is valuable to a degree, to the student who is as desirous of studying the perverted action of the brain as he is the normal action. The harm, however, resulting from the general propagation of such a book amongst the vulgar public cannot be over-estimated. It is hardly conceivable that there is a student of psychology or of psychiatry in this country who is not familiar with the German language. They, therefore, will have little need for the translation.

The book opens with a few pages bearing on the psychology of sexual love followed by a few on the physiology of lust. In both of these it is apparent that the author is familiar, and more or less agrees with Mantegazza. The third part is devoted to general neurological and psychological pathology. Here the author discusses in detail the various forms of sexual perversion varying from sexual erethism to lust murder. Many of the details are revolting and disgusting, and one, after wading through some of them, feels as though his mind had been "tarred and feathered."

The fourth part considers the special pathology, that is the special pathological manifestations of sexuality in the various forms of mental disease. Part fifth is devoted to pathological sexuality in its legal aspects, and here some very valuable information from a forensic point of view, particularly for the German, but little for the American, except as establishing precedences or rulings, is given. The translator has performed his task well, and has followed the original text with commendable closeness. Here and there are observed peculiarities, such as translating "Lücke," as "hiatus," instead of deficiency or shortcoming, and "Das weib ist eine bewegliche Sache eine Waare, ein Gegenstand des Kaufs, Tauschs der Schenkung," as "Woman is a movable thing, a ware, an object of bargain and sale, and gift;" but on the whole, his work has been commendably done. The same may be said of the publisher's work. The volume is well printed, neatly bound, and makes a good appearance.

J. C.

The Students' Quiz Series. Edited by BERN B. GALLAUDET, M.D., Demonstrator of Anatomy and Clinical Lecturer on Surgery, College of Physicians and Surgeons, New York. Volume 8. *Diseases of the Skin*, by CHARLES C. RANSOM, M.D., Assistant Dermatologist, Vanderbilt Clinic, New York. Pocket size, 12mo, 192 pages, 28 illustrations. Limp cloth, \$1.00. Philadelphia: Lea Brothers & Co., 1893.

To those who have use for a "quiz" compend, this little book of Dr. C. C. Ransom is commended. The definitions and descriptions of the various diseases are well given, and the treatment, though, of course, far from full, is eminently judicious. This we should expect from the author's wide experience in dermatological matters. While it is always best for physicians

even when in embryo, as it were, and certainly afterwards, to buy full-grown treatises, still, if a student or physician knew all that there is in the book now before us, he would be prepared to give a good account of himself.

In a rather careful reading of the book we have found much that is praiseworthy; little to criticise. We note that the terms *acne vulgaris* or *acne simplex* are omitted from among the varieties of *acne*; *acarus folliculorum* is scarcely a disease. On page 89 we are referred for the diagnosis of scarlatiniform erythema to the article on scarlatina which is not in the book. We think that *rosacea* and *zoster* are better terms than *acne rosacea* and *herpes zoster*, because they are shorter; *xeroderma* is not given as a synonym or form of *ichthyosis*; *pityriasis rubra pilaris* is not described as a separate disease or mentioned under *lichen ruber*, where some are inclined to place it. These imperfections, if such they be, are so small that they do not mar the book. We congratulate the author upon his most creditable production.

The editing of the book is for the most part good. For the perfecting of further editions we would *suspect* that the word "suspect," in the top line of page 31, is a slip for "expect." A few more leads are needed above the word "Carbuncle," page 40, to make the page well-proportioned. The title "*Erythema multiforme*" is omitted on page 85, and the heading of page 87 is wrong. We would most earnestly protest against the use of illustrations taken from other authors' books without credit. Figures 5, 6, 9, 10, 14 and 20 are all taken from Jackson's "Ready Reference Handbook of Skin Diseases" without the least acknowledgment. Surely this is wrong.

Items.

AMERICAN DERMATOLOGICAL ASSOCIATION.

Programme of the seventeenth annual meeting, to be held at Milwaukee⁴ Wis., September 5th, 6th and 7th, 1893.

Antiseptic Treatment of Skin Diseases. By Dr. C. W. Cutler.

The Principles of Antisepsis in the Treatment of Eczema. By Dr. H. G. Klotz.

Cosmetics. By Dr. R. B. Morison.

A Case of Tuberculosis of the Skin simulating Lupus Erythematosus. By Dr. W. A. Hardaway.

A Case of Rhinoscleroma. By Dr. G. T. Jackson.

Atrophia Maculosa Cutis; with a Case. By Dr. W. T. Corlett.

General Discussion on Pityriasis Rosea: *a*, its etiology; *b*, its relation to ringworm, seborrhœa, eczema, etc., *c*, its treatment.

Dermatitis Exfoliativa: *a*, its clinical forms; *b*, its etiology; *c*, its treatment.

What do we understand by Pemphigus?

A Contribution to the Pathology of Acne Varioliformis. By Dr. J. A. Fordyce.

Angiokeratoma. By Dr. J. Zeisler.

Subject to be announced. By Dr. M. B. Hartzell.

Dr. H. R. Crocker, of London, will read a paper on "*Lupus erythematosus* as an Initiator."



DR. JACKSON'S CASE OF RHINOSCLEROMA.

JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES.

VOL. XI.

OCTOBER, 1893.

No. 10

Original Communications.

A CASE OF RHINOSCLEROMA.

(With Colored Plate.)

BY

GEORGE THOMAS JACKSON, M.D.

Professor of Dermatology, Woman's Medical College of the New York Infirmary, etc.

IN October, 1892, I had the pleasure of presenting to my class at the Woman's Medical College of the New York Infirmary, a case of rhinoscleroma. The case was subsequently shown at a meeting of the New York Dermatological Society. There have been only three cases of this disease reported by the members of the American Dermatological Association since its foundation in 1877. The excellent colored plate that forms the frontispiece of this number of the JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES, admirably illustrates the case of which the following is the history :

Mrs. M., æt 54, born in Hungary. Widow. The disease began sixteen years ago as a slight thickening of the upper lip to the left of and just under the septum nasi. Since then it has grown slowly and without pain. During the past four years it has increased in size more rapidly than during the preceding twelve years. It is said to seem larger at some times than at other times. At present it appears as a hard, well-defined, elevated old-ivory colored mass located upon the upper lip, beginning at a point a little to the right of the middle line, and occupying nearly the whole of the left side of the lip. It runs up on the

left side of the septum nasi to a slight extent. It is slightly lobulated so that it has an uneven surface, and shows a number of dilated blood vessels running over it, and a number of white points apparently representing plugged up and dilated follicles. The skin over it is immovable, being tightly drawn down over the growth. The lip cannot be everted on account of its hardness, that is cartilaginous. The patient complains of no pain, and desires the removal of the growth only on account of the discomfort it occasions in eating and talking, and on account of its unsightliness. There is no history of syphilis, nor does it look like a syphilitic growth. There is no sign of ulceration, nor tendency to break down.

The patient is a shrewd but ignorant peasant, and allows of no surgical interference, not even the cutting out of a piece of the growth for microscopic examination. She had previously been under the care of Dr. Charles W. Allen, of this city, who had been able to persuade her to allow of a small piece of the growth being taken, and this had been examined by Dr. Lustgarten for the bacilli, discovered by Frisch, with negative results, on account of the meagreness of the material. Nevertheless, there can be no doubt as to the diagnosis. It differs from a syphilide in its slowness of growth, hardness, color and form. Epithelioma and sarcoma would not continue growing slowly for sixteen years without breaking down and ulcerating, and without pain. It bears most resemblance to keloid, but the latter is rare upon the upper lip near the nose, and would be apt to be painful when it had attained the size of this growth. Moreover, the course of the disease, its gross appearances and the nationality of the patient all strengthen the diagnosis of rhinoscleroma.

The disease is a very rare one, and most of the cases have been reported from Austria and Southern Russia. Cases have also been reported, according to Crocker, from England, Italy, Central America, Brazil, Egypt, and India, and three have been met with in this country. Only about one hundred cases have been reported altogether.

The disease was first described by Hebra and Kaposi. It is very prone to attack the mucous membranes of the nose and pharynx, and in these localities it becomes dangerous by interfering with respiration, on account of attaining great dimensions, and of involving the larynx. It shows no tendency to disappear of itself, and is sure to return after removal. On the other hand, except when it occludes the respiratory passage, it seems to

have no effect upon the health, and the prognosis as to life is good.

We know nothing definite as to the cause of the disease. It seems pretty certain that there is a bacillus connected with the disease. These were first described by Frisch as short, thick, ovoid, encapsuled, and staining only at the ends. They occur either free, in groups or in cells, and resemble the pneumo-cocci of Friedlander. Histologically, the tumors are granulation cell infiltrations, and by some are regarded as inflammatory in origin, the inflammation being secondary to the blocking up of the lymphatics by the bacilli.

No satisfactory treatment has been found. The best results so far reported have been attained by the use of salicylic acid injected into the tumor daily, a 1 per cent. solution of the acid or a 2 per cent. solution of salicylate of soda being used; while 10 grains of the acid were administered by the mouth three times a day.

A STUDY OF FOUR HUNDRED AND FOUR CASES OF DIVULSION
OF URETHRAL STRICTURE. THE RESULTS IN TWENTY-
EIGHT CASES.

BY

CHARLES L. SCUDDER, M.D.,

Boston, Mass.

THE following paper is a study of a group of four hundred and four cases of divulsion of urethral stricture and a report in detail of the results of the operation in twenty-eight cases. These cases include all those which have undergone operation by divulsion alone at the Massachusetts General Hospital during the past twelve years. During this same period one hundred cases of urethral stricture have been treated by other methods, namely, by internal urethrotomy and divulsion, by internal and external urethrotomy, by internal urethrotomy alone, by perineal section and by divulsion and perineal section combined. Thus during twelve years in the wards of a general hospital five hundred and four cases of stricture have undergone operation.

In an analysis of these cases several facts must be remembered.

1. They were treated by six surgeons.

2. Almost without exception each operation might be regarded as an emergency, the patient suffering from acute retention and having a very tight stricture admitting only a filiform guide.

3. The physical condition of the men operated was poor in almost all instances.

4. In rendering the urethra antiseptic and in the preparation of the urine no special precautions were taken.

5. The instruments in all instances were rendered thoroughly clean, but were not sterilized.

6. The instrument used for divulsion was the Bigelow divulsor.

It is perhaps unnecessary, although not uninteresting, in this connection to sketch hastily the development of the divulsing instruments.

Expansion was first attempted by Desault in 1797. (*Traité des Maladies des Voies Urinaires*, par P. J. Desault, Paris.) When false passages existed, and there was difficulty in passing an instrument into the bladder, he employed a small elastic catheter open at both ends, but containing a stylet with an olive-shaped extremity which closed the end introduced into the urethra. Having reached the stricture he withdrew the stylet and passed another two feet long through the catheter into the bladder, then drew out the catheter over the long stylet and upon the same conductor slipped in another and a larger instrument.

In January, 1845, in a memoir addressed to the Académie des Sciences, Maisonneuve of Paris described essentially Desault's method of sliding a tube over a bougie previously introduced into the bladder, and claimed it as a new method.

In 1855, *L'Union Médicale*, May 26th, Maisonneuve described a method of dilating narrow strictures by screwing to the conducting bougie, already introduced into the bladder, another flexible bougie, a size larger than the first. He introduced this and then added a still larger size, and so on.

In order to obviate the damage to the urethral mucous membrane by friction along the whole passage, instruments were next devised which sought by eccentric dilatation, *i. e.*, after being introduced within the stricture, to expand and so dilate the strictured portion only. Hydrostatic pressure was used. This was impracticable.

In 1812 a Mr. Luxmoor (*Practical Observations on Strictures*. London, 1812, by Thomas Luxmoor, Surgeon Extraordinary to

the Prince Regent,) employed a metallic instrument with four blades which, by means of a screw, were made to expand in situ in four opposite directions. I have had reproduced Gouley's divulsor as illustrating the instrument managed by a screw and accomplishing divulsion laterally by the expansion of the two blades. See Fig. 5.

In 1847 Perrève of Paris (*Traité des Rétrécissements*, etc.,

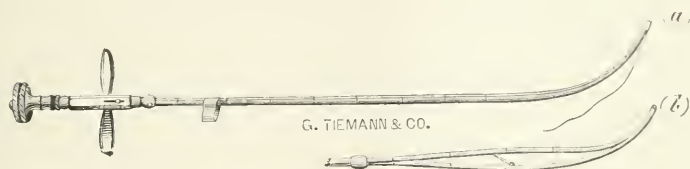


FIG. 5.

par V. Perrève, Paris, 1847,) devised an instrument with two blades united at the extremity which, by means of a screw, can be separated from each other after they have passed into the stricture. The dilatation is only lateral, hence it is imperfect. The mucous membrane gets into the interspaces and is pinched.

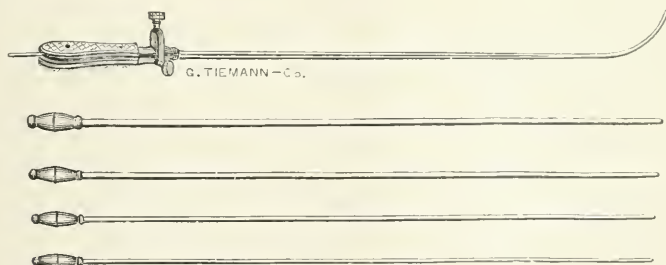


FIG. 1.

To his first instrument Perrève added an improvement, namely, the introduction of a rod during dilatation which filled the gap between the dilating bars of the original instrument, and thus prevented the pinching of the mucous membrane.

Then Mr. Holt of England adopted Perrève's principle and adapted it to forcible rupture or divulsion of stricture. His instrument is doubtless familiar. See Fig. 1. Two narrow blades

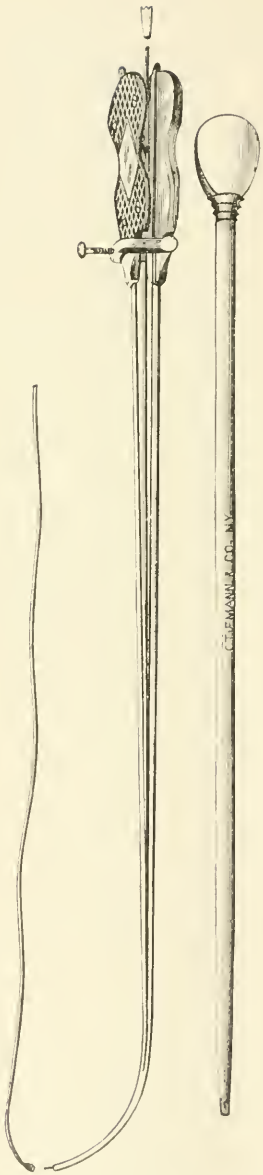


FIG 2.

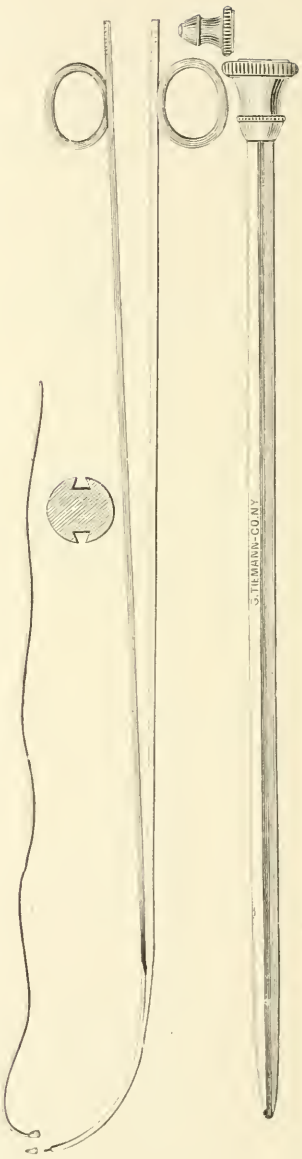


FIG 3.

are fastened at the vesical end, admitting of separation at the other end, this separation being regulated by a set screw. A conducting rod runs from the point—inside the handles—and projects one-quarter inch outside of the handles. Four sizes

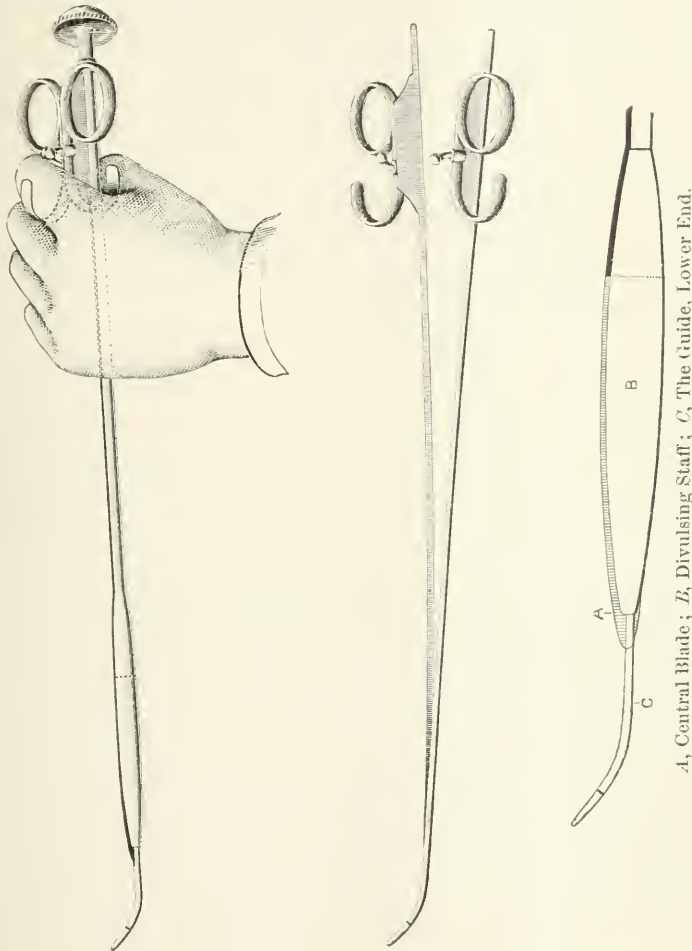


FIG. 6.

of tubes fit upon the rod between the handles. The degree of divulsion depends on the size of the tube.

Dr. Newell, of Boston, has devised a divulsor which offers one advantage in that, if it is to be used in hard strictures (where I believe divulsion is contra-indicated), by means of a sharp edge

almost cutting at the apex of the divulsing shaft, the stricture is most easily entered.¹ See Fig. 6.

Bumstead modified this instrument of Holt by adding to it a filiform bougie guide. See Fig. 2.

Voillemier's instrument depends on the same principle as that of Holt. There is a different arrangement for keeping the divulsing shaft upon the conducting rods. See Fig. 3. Since this time many forms of dilators and expanding rods have been devised.

But not until Dr. Henry J. Bigelow, while busy with his litholapaxy instruments, devised a divulsor which should slide on a central staff, had this method been used. To-day the instrument known as the Bigelow divulsor is the most nearly perfect mechanical device for the divulsion of urethral stricture.

Because of the difficulty in managing the Voillemier instrument there existed the constant danger of perforating the posterior wall of the bladder. The instrument was very long and hence unwieldy.

In 1878 Dr. Walter J. Otis, of Boston, devised an apparatus for holding the Voillemier guide to prevent the possibility of the instrument slipping out of the grasp of the fingers during the operation. This apparatus was fastened to the table on which the patient lay.

Dr. Bigelow disliked the management of the blades of the Voillemier instrument, which were found more or less difficult to control. He disapproved of the stretching of the whole urethra by Holt's instrument, and being often compelled to quickly divulse a stricture in order to facilitate the passage of large evacuating tubes and lithotrites in litholapaxy, he devised the divulsor, which for many years has gone under his name in Boston and its immediate vicinity. It was in 1879 that Dr. Bigelow first used his divulsor. This instrument has never before been described. I wish to thank Dr. W. S. Bigelow for his kindness in permitting me to mention the instrument and to present this out of it. See Fig. 4.

¹ The instrument, as shown in the figures, consists of four principal parts. 1st, the guide *C*, to which a filiform bougie may be sewed. This guide is made with two steel blades, over which the 2d important part, the divulsing staff, *B*, is carried, and between which the 3d important part, the central blade, *A*, passes. This central blade being between the blades of the guide is necessarily within the stricture when the divulsor reaches it and therefore makes the divulsion of the stricture absolutely certain. The 4th important part of this instrument is the handle, which, as may be seen in the figure, is so arranged that the guide is held firmly fixed in position by the left hand, the ulnar side of which rests against the pubes.

The instrument consists of a slender staff (1), curved as is a steel sound at (2) for greater ease of introduction. The bladder end of the staff has a removable tip for the attachment of a filiform guide (6). The divulsor proper (3) is a shaft expanded in a long, oval shape at the bladder end to act as a wedge, but is otherwise straight, and is grooved with a slot throughout its whole length (5) that it may fit the staff (1) as in (4). At the distal end of the staff is a shield for the glans penis, which is placed at a measured distance from the bladder end of the instrument so that when the urethra is held on the stretch ready for divulsion with the instrument in situ, there is absolutely no

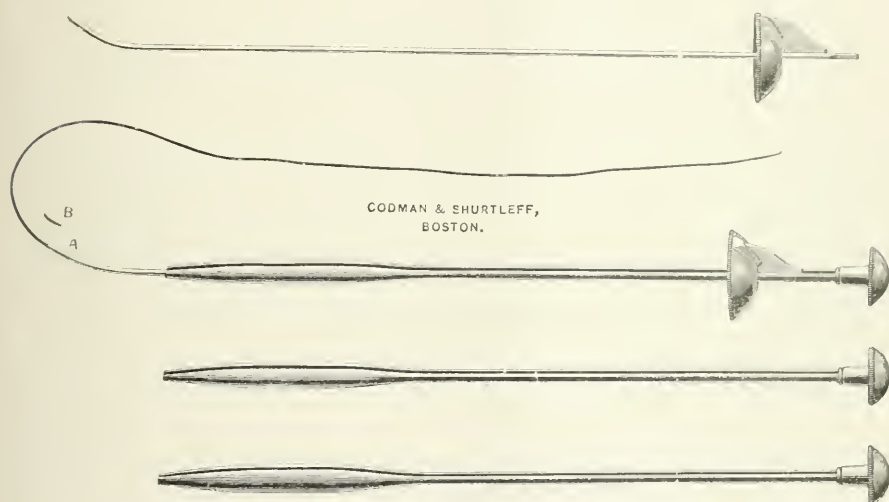


FIG. 4.

possibility of perforation of the bladder-wall. The left hand of the operator grasps the penis and staff, and holds the penis stretched toward the shield. The right hand of the operator pushes the divulsor through the stricture, *i. e.*, the two hands approximate each other. Thus, in the very act of divulsion there is a constant tendency away from the posterior bladder-wall.

The operation is performed in this manner: The filiform guide is introduced to the bladder through the stricture. To the tip of the filiform is screwed the slender staff. This is then advanced into the bladder, following the guide. When the staff

is well introduced and slightly depressed between the thighs, the several divulsors proper, beginning with the smallest size and running up to the largest, are introduced into the urethra on the staff and pushed through the stricture with an even steady force without violence. The divulsor, as originally made, was of three sizes measuring respectively 23, 27 and 32 of the French scale. Larger sizes may be added.

This instrument has been used at the Massachusetts General Hospital in preference to any other divulsor, and was employed in all the cases reported in this paper.

The Mortality.—The total number of cases divulsed was four hundred and four. The total number of deaths was eight. The percentage of mortality, therefore, was 1.9 per cent.

Figures of mortality are most misleading and deceptive. For this reason it is necessary to look in detail at the eight cases which died.

Case 318, Hospital Record, Vol. 231, p. 73, 1887.—A seaman, not married, forty-six years old. Complained of a very small stream and pain referred to the small of his back. The stricture was divulsed, and in eleven days he died. He had these symptoms: abdominal pain, vomiting, scanty amount of urine. The report of the autopsy by Dr. R. H. Fitz is given later in this paper. It is sufficient to note here that the patient was in poor general condition, having chronic pulmonary tuberculosis, acute pleurisy and acute cystitis.

Case 309, Hospital Record, Vol. 229, p. 125, 1887.—A carpenter, married, fifty years old. Has had retention of urine twice in his life, the present time being the second. The stricture was a tight one. It was divulsed, the smallest size of the divulsor being used. He failed steadily after the operation, and died in three days. His highest temperature was 103.2 Fah. No autopsy.

Case 363, Hospital Record, Vol. 237, p. 185, 1887.—A harness maker, single, thirty-four years old. Has had gonorrhœa many times, and presented a tight stricture and a small stream. He was obliged to use considerable force in order to micturate. He had a chill after the operation, the temperature rising to 103 Fah. Some nausea and vomiting were present. He died in a few days, and the autopsy showed that the man had Addison's disease, and was in miserable condition.

Case 336, Hospital Record, Vol. 234, p. 48, 1887.—A currier, single, twenty years old, came to the hospital with acute retention of urine, was divulsed and died in three weeks. The record

is very meagre. There was one symptom only throughout his illness—diarrhœa. This persisted without recognizable cause. No autopsy.

Case 62, Hospital Records, Vol. 196, p. 50, 1881.—A hat maker, single, thirty-five years old, has had retention several times, was divulsed, and died in two days. Steady failure after operation.

Case 56, Vol. 196, p. 168, 1881.—A mason, married, seventy years old, entered the hospital with retention of urine, usually passes a very small stream. In the emergency he was aspirated through the rectum (an operation very seldom done to-day at the hospital) and the next day he was divulsed. In nineteen days he died, vomiting persistently from the time of the operation till his death.

Case 490, Hospital Records, Vol. 258, p. 119.—An engineer, married, sixty-five years old, has had gonorrhœa years previously, entered the hospital with acute retention, which he has had before, stating that he has passed a small stream for some time. He was divulsed, and in two or three days died suddenly. The record reports him to have had a pyelonephritis. His highest temperature was 99.5 Fah.

Case 481, Hospital Records, Vol. 257, p. 264.—A seaman, married, thirty-nine years old, had had gonorrhœa some years ago. Appears with a foul cystitis and history of many attacks of retention of urine. Has a stricture which is divulsed, and in eight days he died. Persistent vomiting is present until his death. Temperature rises to 102 Fah.

The ages of these cases which died were respectively forty-six, fifty, thirty-four, twenty, thirty-five, seventy, sixty-five and thirty-nine years. Three were fifty years or over. Five were under forty-six.

The time, in days, at which death occurred after the operation was in each instance as follows: seven, three, fourteen, twenty-one, two, nineteen, one and eight.

These deaths occurring after the operation of divulsion, done in many instances as an emergency operation on tight urethral strictures, must not be interpreted as the true mortality of the operation in general practice and upon selected cases. This is the mortality in unselected cases. Some of these deaths very likely might, if autopsies could have been obtained, have been explained by conditions totally independent of the operation *per se*. The mortality in this group of cases, however, is about 1.9 per cent.

Hill reports one hundred and forty cases of stricture, one hundred and twenty of which were divulsed by Holt's instrument. One hundred and eighteen recovered and two died. One death is said to have been due in no way to the operation of divulsion. He considers the operation as of no more risk than an ordinary dilatation.

THE CONSTITUTIONAL DISTURBANCE FOLLOWING THE OPERATION.

This may be determined by considering the occurrence of chills, the temperature, the duration of the stay in the hospital.

There are no other facts recorded of these cases in the hospital records which would be of value in determining this question.

In looking over the whole group of cases I find that the result is practically the same if we consider only the twenty-eight cases which have reported in person. The amount of disturbance is pretty uniform.

Chills.—It will be seen from the tabulated cases that of the twenty-eight eight had chills after the operation. In two of these instances the temperature was not recorded. The highest temperature recorded with the chill was 105° Fah. The lowest record with the chill was 100° Fah.

Temperature.—The temperature ranged from normal to 105° Fah. The average temperature was about 100° to 101° Fah.

Stay in the Hospital.—The days spent in the hospital following the operation varied from six to thirty, an average of about twelve days.

It will be seen by reference to the table of those who reported in person for examination that a sound was passed usually five days or so after the operation. This was oftentimes coincident with the highest rise in temperature.

Again, it will be noticed, that in all but three cases, mention is made of a catheter having been in place from the time of the operation and for from one to six days thereafter, and in one instance the catheter was worn fifteen days. The removal of the catheter was sometimes attended by a chill. Those patients having chills, with one exception, were detained longer in the hospital under supervision than were those not having chills.

In no instance recorded, unattended by complications, was there great constitutional disturbance following the operation of divulsion.

In a study of these four hundred and four cases it must con-

stantly be borne in mind that the conditions are peculiar. A routine operation has been done by general surgeons for several years. The exact seat of the stricture has not been recorded. Some have been in the penile urethra and more of them in the deep urethra. The character of the stricture has differed. Some have been composed of the toughest cicatricial tissue, others have been delicate cords which have snapped before the divulsor with ease, and yet in all these instances, the same operation has been performed, namely, that of divulsion.

These cases of divulsion, then, cases done without discrimination as to the details of the conditions present, form a mass of material which in surgical literature is probably unique. What do these cases, seen several years after the performance of the operation, teach as to its permanence?

The Permanence of the Operation.—In studying this question three things must be considered: 1. The size of the sound used immediately after the operation. 2. The subsequent use of the sounds. 3. The time which has elapsed since the operation.

At the Massachusetts General Hospital it was the general custom for some time to pass no larger sound than a 23 or 28 of the French scale. These sizes Holt regards as large. Such a view as Holt's was generally accepted until Dr. Otis, of New York, established the fact that each urethra bears to the circumference of its penis a definite relationship, so that to-day these sizes seem small rather than large.

When a patient leaves the hospital, it has been the custom to caution him either to appear at stated intervals at the Out-patient Department and have sounds passed, or to procure for himself a sound and learn to pass it, and he is often taught how to do this before leaving the hospital, or to go to a physician and have a sound passed at regular intervals.

In the table in the column marked "sounds used since operation," the "yes" interpreted means a variable time, usually every other month. In only a few instances have no sounds been used.

My impression from conversation with these patients is that in almost every instance, if the sounds are not pretty regularly used, the stricture tends to return. This is not true of all. Take the case marked Vol. 231, p. 252. He took on leaving the hospital a 29 of the French scale. He was in the hospital only ten days and the sound was passed on the fifth day, so that it could not have been passed many times. It was never passed

after his leaving the hospital, and yet at the end of five years and four months he takes a 26 French with perfect ease, and I think might have taken a 27 French.

If these cases are to be compared with the individual experience of operators using other methods, and in private practice, due allowance must be made. Strictures relapse after any method of operation. If a comparison of methods is made, let it be made fairly.

It is significant that whereas the location and exact size of the strictures in the above series of four hundred and four cases are not mentioned, yet almost all of the strictures were of small calibre and not of large calibre.

THE PATHOLOGICAL APPEARANCE OF THE URETHRA AFTER DIVULSION FOR STRICTURE.

Holt in 1888 originally maintained that the forcible distension caused by the dilator affects the morbid obstruction only. The urethra in the very large majority of cases being proved, to be unaltered in its structure, is not torn, but simply dilated, and the submucous deposit, the cause of the obstruction, is alone split, hence the trifling hæmorrhage.

I have collected twelve cases of divulsion in which death occurred from other causes than the divulsion, and in which an examination of the urethral mucous membrane was made. I have added to this list two cases from my series of deaths, making fourteen autopsies here recorded.

The weight of the testimony of these cases demonstrates, I think, that the urethral mucous membrane is sometimes involved in the rupture, that the rupture takes place in longitudinal slits, sometimes through the stricture tissue and again outside of it, that the rupture is sharply defined and not raggedly lacerated, and that the remainder of the urethra is unharmed by the divulsor.

The following are the pathological reports as complete as could be obtained :

[Clinical lecture on two cases of death after Holt's operation by R. W. Tibbitts, Surgeon to the Bristol Royal Infirmary, Lecturer on Surgery at the Bristol Medical School. *Medical Times and Gazette*, August 2nd, 1873.]

Case I.—Divulsed. Six days after operation rigor, scanty urine, coma and death. Examination: Kidneys, numerous hæmorrhagic spots varying in size from a pin head to a small

pea. Many of these spots show signs of softening in their centre. Bladder healthy, walls hypertrophied. Around the seat of the stricture at the junction of the spongy and membranous portions of the urethra was a slight extravasation of blood. The mucous membrane over this part was perfectly smooth. There was no apparent rupture of it.

Case II.—Man 46 years old. Stricture for two years untreated. Divulsed with Holt's instrument. Rigor for twenty-four hours the following day. Suppression of urine for twenty-four hours. Death sixty-two hours after the operation. Examination: Kidneys healthy. The urethra was slightly congested along the whole tract and at the junction of the spongy and membranous portions there was a patch of deep congestion, showing the seat of the stricture. There was slight extravasation of blood into the tissues around this for a depth of about one-eighth of an inch. The mucous membrane over this point was examined and by the microscope showed no signs of rupture.

Dr. Miller of Edinburgh in a paper on "Organic Stricture of the Urethra and its Treatment by Holt's Method," records a post-mortem upon a patient upon whom he operated nineteen days prior to his death, occasioned by obstruction of the bowels. The urethra on being cut open showed no trace of a rupture or a cicatrix.

Dr. McDonald of Dublin in a paper on "The Treatment of Stricture by the Dilator," reports a case of stricture operated on followed by death and autopsy. There was no sign of the disease having existed save for a dilated canal behind the seat of the old stricture.

Three cases are reported in Holt's paper on "Opinions and Statistics on Immediate Treatment," where the parts were examined shortly after death and after divulsion, and in which the mucous membrane was found to be entire, the mucous membrane being generally free from pathological change.

In 1870 Reginald Harrison showed a urethra of a patient upon whom Holt's operation had been performed shortly before death. The operation was performed under urgent circumstances, and in no way appeared to contribute to the death of the patient, who was suffering from a dropsical affection. On opening the urethra the stricture was found completely split, including the mucous membrane, commencing rather in front of the stricture and extending backwards somewhat obliquely to one side.

Gouley, in his monograph an stricture contained in his book, at page 63, relates the following cases:

Case II., p. 63, 1868.—Retention of urine thirty-six hours. No entrance. Stricture for many years, filiform. Divulsion. Death in eight hours. Examination: Bladder hypertrophied and inflamed, the ureters and kidneys seriously diseased. A number of short longitudinal rents were found through the mucous membrane at the seat of the stricture, mainly in the floor of the urethra.

Case III., p. 63, 1868.—Stricture of seven years' duration. Divulsion without a guide. Died on the fifth day. Examination: the urethra having been laid open along its upper surface, a number of oblique and longitudinal slits or rents were found, mainly upon its floor at the seat of obstruction and extending backward to the bulbo-membranous junction. The rents were from one twenty-sixth to one-fourth inch in length, and involved the mucous membrane, which was somewhat thickened.

Case IV., p. 64, 1869.—Divulsion. Uræmia. Death two days later. Examination: at the seat of the stricture there was a longitudinal rent of the mucous membrane and submucous tissue along the floor of the urethra, about one inch and a half in length. This rent with the exception of two slight bands, which extended across its middle, was nearly as straight and almost as sharply cut as if it had been done with the blade of a urethrotome.

Group I., Case V.—Divulsion done and died in three and a half months. Examination: the divulsed portion of the urethra extended from the point of obstruction to one inch and a half backwards, and was one-eighth of an inch more in circumference than the healthy canal in front. Traces of several longitudinal rents were observable on the floor of the urethra, but showed firm cicatrization.

Case 318, Mass. Gen. Hosp. Series.—J. O., 46 years old, divulsed July 22nd, 1887, died August 2nd, eleven days after the operation. Autopsy by Dr. R. H. Fitz. The bladder and kidney and urethral report alone recorded here with the whole pathological diagnosis.

Kidneys slightly smaller than normal. Capsules readily detached. Surface somewhat paler than normal. Tubular regions readily recognized, not materially modified in color. Nothing abnormal in the appearance of the pelvis and ureters.

Bladder moderately distended, containing some four ounces of slightly opaque, reddish-yellow urine. The wall thickened,

trabeculated more prominent than normal. The mucous membrane showed numerous patches of dark and hæmorrhagic infiltration.

Urethra was ruptured in the membranous portion by a sharply defined tear an inch and a half long in the vicinity of which was cicatricial tissue. No evidence of lesion of the spongy or cavernous bodies. No purulent infiltration of the perivisceral or pelvic tissue. Recent thrombosis of the vesical plexus. No enlargement of the lumbar and mesenteric glands. The pelvic peritonitis less extreme than that of the vicinity of the liver. Diagnosis: Chronic pulmonary tuberculosis; acute pleurisy; acute peritonitis; acute inflammation around the gall bladder; acute cystitis; divulsed urethra.

Case 363, Mass. Gen. Hosp. Series.—At the autopsy by Dr. W. F. Whitney the urethral mucous membrane was found to be intact and with no serious lesion of it, as if torn at any recent time.

Conclusions from the above material:

1. The Bigelow divulsor is a safe, simple and efficient instrument.

2. The mortality in this series of cases is about 1.9 per cent. Considering the character of the cases, the physical condition of the patient, the most impermeable strictures which had existed in many cases for years, the fact that the cases were subjected to the operation of divulsion as a routine operation, *i.e.*, were not selected cases; considering these facts this mortality is low, and should lead one to suppose that in properly selected cases the mortality would be still lower.

3. After divulsion the amount of constitutional disturbance was comparatively slight even in these cases. The urgency of the symptoms was so great as to preclude preliminary preparation. With recent methods of urinary asepsis and urethral antisepsis even less constitutional disturbance should follow.

4. Taking all things into consideration the permanence of the results in this particular series seems fairly satisfactory.

5. In many instances divulsion probably increases the cicatricial tissue surrounding the urethra because the cicatricial tissue sometimes occurs in stricture tissue and extends into healthy tissue.

6. The operation with the Bigelow divulsor is not regarded by those familiar with it "as violence applied to the urethra in a rude fashion," but a method at once accurate, easy, ready, safe and almost bloodless.

Table of 28 cases of *Urethral Stricture*, with results after division.—*Mass. Gen. Hosp. Record.*

Vol.	Page.	Age.	Operation.	Catheter in place.	Sounds passed.	Chills.	Temperature.	Time in Hospital.	Time elapsed since Operation.	Sounds used since Operation.	Present Condition.
249	31	26	Division	4 days	5th day, 35 F. 8th day, 30 F.	None ..	101 F...	12 days	3 yrs. 7 mos.	Yes, once a month...	Takes 30 F. with ease.
248	163	58	Division	3 days	8th day, 30 F.	None ..	100 F...	12 days	3 yrs. 6 mos.	No	Takes small French. No symptoms.
238	175	48	Division	5 days	7th day, 11th day, 28 F. 4th day, 25 F.	Chill ..	100 F...	11 days 7 days	4 yrs. 9 mos. 5 yrs. 7 mos.	Yes, for one month. Yes, for four mos...	Takes 13 F. Takes 30 F. with ease.
231	110	33	Division	2 days	3rd day, 26 F.	Chill ..	105 F...	22 days	4 yrs. 7 mos.	Yes	Takes 25 F.
248	216	43	Division	2 days	8th day, 26 F.	None ..	Nor.	10 days	2 yrs.	Yes, for two mos.	Takes 26 F.
263	171	35	Divulsed. Cocaine	3 days	.....	None ..	.....	6 days	4 yrs.	Yes, two	Takes 21 F.
241	124	53	Divulsed	2 days	3rd day, 27 F.	None ..	.....	7 days	7 yrs.	Yes	Takes 29 F.
222	234	42	Divulsed	1 day	.....	None ..	.....	10 days	4 yrs. 3 mos.	Yes	Takes 25 F.
241	71	41	Without ether Divulsed. Two sizes	3 days	6th day, 25 F.	None ..	100.2 F.	10 days	4 yrs. 3 mos.	Yes	Takes 18 F.
246	109	54	Divulsed	6 days	6th day, 24 F.	None ..	100.5 F.	10 days	1 yr. 3 mos.	Yes, none for six mos.	Takes 26 F.
270	29	12	Divulsed	1 day	18th day, 29 F.	None ..	100.5 F.	25 days	1 yr. 8 mos.	Yes, none for three mos.	Takes 25 F.
214	231	29	Divulsed	15 days	4th day, 28 F.	None ..	99 F...	.....	1 yr. 6 mos.	.....	Takes 29 F. sl. stricd. at 29 F.
266	7	27	Divulsed ....	.....	.....	.....	.....	.....	.....	.....	.....
196	25	36	Divulsed	2 days	3rd day, 24 F.	Chill ..	.....	16 days	12 yrs.	Yes, none for two yrs.	Takes 28 F.
264	36	69	Divulsed ....	.....	5th day, 30 F.	.....	.....	.....	1 yr.	Yes	Takes 25 F.
266	92	..	Divulsed	5 days	5th day, 28 F.	None ..	100 F...	30 days	1 yr. 6 mos.	Yes	Takes 30 F.
200	133	56	Divulsed ....	.....	.....	.....	.....	.....	.....	.....	.....
258	252	36	Divulsed	2 days	8th day .....	.....	.....	17 days	11 yrs.	No	Ant. urethra 27 F. Deep stricd. 16 F. won't pass.
263	165	23	Divulsed	3 days	3rd day, 26 F.	None ..	100.8 F.	6 days	2 yrs. 6 mos.	Yes	Takes 26 F.
265	68	60	Divulsed. Two sizes	2 days	....., 23 F.	None ..	100 F...	11 days	2 yrs.	Yes, not past two mos.	Takes 11 F.
254	48	70	Divulsed	5 days	5th day, 21 F.	.....	.....	18 days	1 yr. 8 mos.	Yes	Takes 28 F.
245	19	31	Divulsed	Yes ..	.....	.....	100.5 F.	8 days	3 yrs.	Yes	Takes 21 F.
231	252	48	Divulsed	2 days	8th day, 24 F.	Chill ..	100.9 F.	8 days	4 yrs.	Yes	Takes 31 F.
254	101	56	Divulsed	2 days	5th day, 29 F.	None ..	99.8 F.	10 days	4 yrs. 4 mos.	No	Takes 26 F.
210	168	58	Divulsed	1 day	2nd day, 29 F.	.....	102.2 F.	9 days	3 yrs.	Yes	Takes 21 F.
228	85	43	Divulsed	4 days	9th day, 29 F.	Chill ..	104 F...	20 days	9 yrs. 6 mos.	Yes	Takes 21 F.
196	138	28	Divulsed	2 days	6th day, 27 F.	Chill ..	101 F...	31 days	6 yrs. 3 mos.	Yes	Takes 30 F.
			Divulsed ....	.....	.....	Chill ..	.....	14 days	12 yrs.	Yes	Takes 28 F.

7. There is a distinct and rational place for divulsion as a surgical proceedure.

In firm, tough stricture divulsion is contraindicated.

There are soft strictures, but firm enough to cause retention of urine, which yield to very little force, and it is this class of stricture for which divulsion, it seems to me, is pre-eminently the operation.

The penile stricture is almost always firm and composed of more dense cicatricial tissue than is the deeper urethral stricture, and in the anterior penile urethra internal urethrotomy seems to be the better operation.

No one procedure is the operation in all cases of stricture. A careful study of the character and seat of the stricture should determine the exact operation to be done.

Divulsion with the Bigelow divulsor should be reserved, it seems to me, for soft deep strictures unaccompanied by much cicatricial tissue.

1 Marlboro Street.

A CASE OF RINGWORM OF THE SCALP SIMULATING ALOPECIA AREATA.

BY

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THE following case serves to show that it is possible for *tinea tonsurans* to produce a patch of baldness clinically indistinguishable from alopecia areata.

The patient, a boy seven years of age, came to my clinic a week ago with a perfectly bald spot on the top of the head about two inches in diameter. His hair was of a light brown color and thickly covered the remainder of the scalp. Upon very careful inspection no other bald patches, scaly points or patches of any kind could be found; he was perfectly well as far as could be ascertained, and no history of previous illness, traumatism, neuralgia, etc., could be elicited. The cutaneous surface was perfectly free from eruption.

The bald patch in question was situated upon the centre of the vertex, its posterior edge occupying the position of the so-called "crown"; its transverse diameter was a trifle less than the antero-posterior.

From the clinical features one would not hesitate a moment in making the diagnosis of alopecia areata. The surface of the patch was perfectly smooth and white, absolutely devoid of scales, the mouths of the empty hair follicles could be seen only with a glass, and there was not even a trace of a downy growth. Around the edge of the bald patch were characteristic stubs of alopecia areata from $\frac{1}{32}$ to $\frac{1}{16}$ inch in length, with the apparently enlarged distal extremity which has warranted for them the appropriate name of "exclamation point" stubs. The hair immediately surrounding the patch came out easily by slight traction with the fingers.

The history of the case was quite different from that which generally accompanies alopecia areata. The disease began six months ago as a small, scaly papule which gradually enlarged to the size of a little finger nail before the hair fell out. The mother states that it was red and scaly, and not smooth as at present, but as the patch grew slowly larger it lost its "mussed up" appearance, as she called it, and became smooth and shiny. I was also able to obtain an undoubted history of contagion, there being several children in the house with scaly spots upon the scalp. The mother jokingly said "Our old black cat even had a spot fall out on her leg."

On the strength of the above history, I took several of the stubs for microscopical examination and took the trouble to visit the above-mentioned children.

Among the half dozen or more short hairs which were obtained and placed in a mixture of equal parts of glycerine and liquor potassa, there was one in which the root-sheath came out entire. By careful focussing there could be seen numerous small spore-like bodies within the sheath and scattered through the sheath substance. They were rather indefinite in outline, and in some situations presented a granular appearance. The slide was put into a warm place and left three or four days, when it was again examined and quite a different picture was seen. That which was at first indefinite and presented a granular appearance had developed into masses of regularly formed, small, round spores, differing in no respect from those of trichophyton tonsurans, although they were a trifle larger than those ordinarily seen. The root-sheath was almost completely filled and permeated with these spores which completely surrounded the hair root but did not penetrate the hair substance. No mycelium could be found upon the closest and most careful examination.

Dr. Bulkley kindly examined the specimen and pronounced it as unquestionably an example of the trichophyton fungus.

Besides this direct evidence of the true nature of the disease, some of the other hairs were found to present the brush-like extremity so commonly observed in hair affected with the ringworm fungus. On the other hand there were hairs differing in no respect from those found in alopecia areata, characterized by a shaft of irregular calibre due to atrophy, by the irregular deposits of pigment scattered through it and by the peculiar atrophied and more or less pointed hair root.

Upon visiting the house where the patient lived two children were found living on the same floor affected with true ringworm, one, a boy of five years, had several characteristic scaly patches upon the scalp, covered with broken and twisted hairs; the other, a girl of eight years, had a small ringed patch with clear centre and raised, red, scaly periphery on the left side of the neck, and another irregularly ringed patch of the same description upon the right upper arm. There was no trace of the disease on the scalp in this latter case.

On the floor below, there was a little girl four years of age who had a single, small, scaly patch of ringworm on the scalp. By an examination of the hairs and scales taken from these cases abundant fungus of the trichophyton variety was found.

The black cat above spoken of had a bald patch on the right hip, over about one-half of which there was a new growth of perfectly white hair; the spot was smooth and white and free from scales. There was no appearance of a scar and they were all positive there had not been a sore there, for it would have been quickly noticed as the cat was a great pet and was constantly being fondled by the children. Careful examination of hairs and scrapings revealed no evidence of fungus of any kind.

It was impossible to ascertain the order in which these cases became infected, for each family accused the other of being responsible for the trouble.

One can see, I think, how readily this case would pass for one of alopecia areata, with history of contagion, and I should be inclined to think that some, at least, of the reported cases of alopecia areata of the so-called parasitic variety, giving a distinct history of contagion, were cases of this character. Even Hillier¹ says of the forty-three cases of alopecia areata infected in a parochial school of 1,100 children at Hanwell, "in

¹ Hillier, "Handbook on Diseases of the Skin," 1870, p. 278.

the root-sheaths of two or three hairs I found a number of oval and quadrangular cells placed end to end, or clustering together like vegetable spores." He thought they could not be fungus elements for they were a little larger than those ordinarily seen in ringworm. We know now that the spores of the trichophyton fungus vary very much in size, and consequently little reliance can be placed upon this feature.

In the several cases of alopecia areata which Crocker observed in members of the same family with direct history of contagion, he says he found in the hairs about the border of some of the patches "fungus elements indistinguishable from those of tinea tonsurans."

Whether there are cases of alopecia areata due to some specific micro-organism remains yet to be proven, though it seems hard to understand how a parasite of any kind can produce such sudden falling of the hair with production of bald patches, as we invariably observe in cases of true alopecia areata.

4 East Thirty-seventh Street.

THE CLINICAL HISTORY OF A CASE OF "XERODERMA PIGMENTOSUM."

BY

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E C., aged (when first seen, May 4, 1892,) 34 years 8 months. Lawyer, in robust general health but reduced about thirty pounds as the result of numerous caustic applications by a "cancer doctor." No history of other skin disease or illness. He had fair complexion, blue eyes, hair of a lighter shade than the beard—both getting gray (the latter thin). The hair afterwards grew rapidly gray. Height six feet two and a half inches, weight 180 pounds, normal weight 210 pounds. The only living child of first cousins. He had a sister who died of hemorrhagic malarial fever at fourteen. Uncle of his mother and father died of "cancer." Mother's father had a "chronic sore" on the face, but died of malaria and kidney disease. Mother living in fairly good health. His father died of pneumonia at thirty-five (patient then aged six). He sometimes

drank to excess. This is also said to be true of the patient. Was reared on a farm but did not work—went to school.

Primary Lesions.—The disease began on the face at eighteen, as well as he can remember, as "little, rough, scaly spots" averaging the size of a flake of bran, gradually enlarging peripherally. Removal of the scales exposed a thin, gummy exudation. He said the majority of the lesions persisted in this form. When examined—over both cheeks, especially above horizontal lines from the oral angles to the ears, slightly in bearded portion of the face, on the forehead, scattering on the sides and back of the neck, the following lesions: dark brown, pigmentary spots, from half pea to dime in diameter, the smaller as simple lentigines, enlarging they become depressed and show a network of fine vessels—telangeiectasis. Proceeding further, some of them become adherently crusted with dry, sebaceous matter, and may become reddened, with a more or less distinct areola, slight ulceration occurring in points beneath the crusts. These lesions were as large as a silver quarter. The new growths are supposed to have originated from this form. Their crusts varied in color from dark brown to almost black. Where the lesions are most numerous there is a general, fine telangeiectasis of the skin. Intermingled with the above lesions are a few simple apigmentary points, with or without telangeiectasis, or slight atrophy. Another form of lesion, which he said was primary, is that of pea to dime diameter characterized by simple, slight, papillary hypertrophy—the papules about the size of a small millet seed, the lesions well defined, covered with a thin, adherent scale or crust, the removal of which, without wounding the papillæ was difficult. Some of these were free of scale in their early stage. In some of the atrophic, apigmentary spots minute, anæmic papillæ are seen through their thin epidermic covering. The sebaceous follicles on each side of the nose, in the naso-labial furrows and beneath the lower lip plugged with a blackish, dry, sebaceous substance. Patches of plates of a similar substance on each side of the bridge of the nose; present for the past two weeks. On the back of the left hand a number of large, lentigo-like lesions, and one dry, slightly scaly, papular point. On the back of the right hand a number of roundish, atrophic, apigmentary lesions, a few slightly scaly points and a few of the usual pigmentary lesions. No telangeiectasis on either hand. The disease is limited at the wrists—then there are a few lentigo-like points on the arms. The hands are as shapely, soft,

smooth and hairless as a woman's. The skin beneath the clothing very fair, soft and smooth. The latter part of June it was noted that the lesions appeared less marked, and some, as the fine papular on the forehead, had either atrophied or simply subsided. The blackish crusting on the nose disappeared in a few weeks, under the use of a (carbolic?), salve by the patient. Later—when the patient was confined entirely to the house—all the above-described lesions appeared still fainter—save one or two of the older, crusted ones: but when seen a month later there was an increase of the sebaceous crusting on the older lesions and a tendency to faint papulation in some of the intermediate ones. This tendency to oscillation between better and worse was characteristic throughout. The older lesions showed no vestige of pigmentation, save in the crusts. I saw him for the last time in October, just three months before his death. The older lesions showed a persistence of the dry, sebaceous crusting, while many of the apparently more recent were scarcely visible. During the time he was under observation there did not appear to be any development of new lesions of the kind above described. No local treatment was employed for the "skin trouble"—my efforts having been directed to the management of the "new growths." Had any "new growths" appeared in the primary lesions, it was my intention to attempt their entire removal by excision. The actual course of the lesions was not always well remembered by the patient or easy of definition by myself. The characteristic localization to the exposed parts of the skin, the parts which usually "freckle," is worthy of note.

The new growths.—The first of these appeared twelve years before, at twenty-two, four years after first noticing the other lesions, over the middle of the border of the body of the lower jaw—left side—as a pea sized, warty growth which gradually enlarged during eight years until it reached the diameter of a silver quarter. It had then become a raised "swelling," the surface open, irregular, discharging a mucoid, offensive substance which dried into thin, loose, temporary crusts. A "cancer doctor" then destroyed it with a "vegetable paste." It recurred in twelve months at the posterior superior margin of the scar, possessing the same characteristics as before. Another "cancer doctor" removed this—with an unknown "paste." Recurrence in six months. Treated by the same man—apparently more successfully. A livid, furrow-like scar following the border of the jaw marked the seat of the diseased

growth. This scar was two inches long, and half an inch wide, and showed a close network of dilated vessels. At the posterior end of this, just above the angle of the jaw, was a linear depression, reddened, not a part of the scar, its sides showing a number of small sebaceous crusts; and a pea diameter, cicatricial point at the upper end. A cutaneous horn on the left side of the nose was destroyed by a "paste" five or six years before, leaving a marked, smooth, white scar. About four years before a half pea sized growth developed beneath the right ear over the anterior border of the sterno-cleido-mastoid muscle, soon became ulcerated and depressed and discharged a yellowish-red, mucilaginous, fœtid substance. At about the same time a somewhat similar growth appeared over the ramus of the right jaw. This was destroyed by a paste in April, 1888. The one beneath the ear was first treated ("paste") a year before, and not having been cured, sixteen similar applications were made from December, 1891, to April, 1892, during which torture he became addicted to the morphine habit. When these notes were made there remained, at the site of the "burnings" an unhealthy opening the size of the finger-tip, surrounded by a livid, brawny infiltration. The tragus of the right ear became diseased and was excised in 1884. Growing from this site, when examined, was a globular, livid, elastic "tumor," sensitive to the touch, filling the cavity of the concha; a small opening below from which oozed a thin, yellowish, odorless fluid. This growth had developed in the preceding three weeks. In front of this below the right zygoma, a diffuse, livid, rather elastic swelling, seated upon which were a number of dark, thin, loose crusts. The scar of the first tragus operation separated this, and the present tragal growth. In 1884 the actual cautery was also used in this region, but with bad effect. About the same time a depressed, crusted lesion was excised just below the right malar bone, leaving a deep, smooth scar.

May 4, 1892, I removed the tragus growth—under ether—antiseptic precautions, using the knife and scissors to cut through its origin. This was composed of firm tissue, the remainder, the globular portion, consisted of a thin, cutaneous capsule enclosing a soft, brain-like substance easily removable, down to the bottom of the conchal cavity, with the curette. The external auditory meatus was found involved. Iodoform and iodoform gauze used as a dressing. Five days later a little pus was noticed, and at tragal margin, a beginning regrowth.

At the end of three weeks the wound was "about healed," but the recurrent growth was the size of a large pea, having its seat in the skin. This was removed, under cocaine, a week later. Beneath the skin covering was the same soft, granular material as in the former growth. Removed all with the curette and thoroughly swabbed the wound with pure carbolic acid. Twelve days later the wound showed unhealthy, easily bleeding granulations. A week after this growth had begun to form in the antitragus, and the operated wound and all about the meatus were unhealthy, granular, oozing sero-pus, and the tissues below, including the numerous burned place were livid, infiltrated, brawny. A few waxy, shot-sized papules appeared on the posterior surface of the concha. The latter never changed during my observation of the case.

The opening below the ear was cauterized several times with the nitrate of silver stick, and kept packed with iodoform gauze. It never healed—filled with exuberant granulations; these broke down; pus formed, and so on in rotation, finally reaching in depth almost to the cervical column. As the diseased conditions of the tissues increased and involved the region of articulation of the jaw (as well as the right side of the face) the patient was unable to separate the jaws more than half an inch. A scratch in the scar on the right cheek was followed by the formation of pus, and crusting. The point above the left maxillary angle became papular, ulcerated, crusted. Progressive weakness and the more or less constant pain in the right aural region kept the patient in bed most of the time after the first two months. The antitragus growth gradually involved the lobe of the ear, while the entire region around and including the meatus was in an unhealthy granular, papular, ulcerative condition, and the tragal region was undermined. Once (only) a cheesy substance was pressed out of the sub-aural opening. The livid, brawny condition described persisted—better or worse—throughout, until it broke down. The destructive process gradually advanced in all directions, and upon one occasion a marked "carcinomatous" odor was observed. When I visited him at his home in a distant town, in August, the right facial nerve had become involved, producing complete paralysis of the muscles it supplied, the right half of the lip was swollen, and there was an almost constant flow of saliva from this side.

When last seen, October, 1892, the destruction had reached the depth of the body meatus, to the middle of the zygoma in

front, and most of the lobe of the right ear was destroyed, through breaking down of the last new growth. and the mastoid process was almost exposed.

The patient died of exhaustion three months later, fearfully emaciated. There was no hemorrhage from any of the vessels destroyed by the disease. His family physician wrote that, at the end, the surface destroyed extended from the outer canthus of the right eye down, including the ear, nearly to the clavicle.

Microscopic Examination.—Unfortunately, every specimen prepared from the two growths removed was lost in changing my office, and I have to trust to my memory of examinations made last summer. Most of the sections were stained with borax-carmin, some from the last tumor with osmic acid and mounted in glycerine, without having been in alcohol (were frozen for section). No malignant disease was apparent in any of the sections. There was simply an atheromatous condition, with an apparent hypertrophy and numerical increase of the sebaceous glands. The sebaceous glands were stained a dark brown in the osmic preparations, and the lower layers of the rete almost as brown. The brain-like substance was composed of granular cells, staining poorly, and detritus, as of partly broken down sebaceous glands and contents. It was impossible to get other specimens or a *post-mortem*.

Treatment is worthy of mention only to demonstrate further two already well-known facts: viz., its futility in this disease and the impossibility of getting it followed by patients in many. Syrup of iodide of iron was taken for a time. "Asiatic pills" were badly borne and he abandoned them. Fowler's solution "disagreed," and he stopped taking it. He continued his morphine, taking as much as a small coffee spoonful at a dose, one to three times in twenty-four hours. During the last few months the wound was dressed twice a day with a twenty per cent. solution of ichthyol (stronger than ordered, but continued when it was found not to irritate). His physician was accustomed to add a little morphine to one dressing each day. Pure carbolic acid was occasionally applied to the sub-aural cavity.

His mother had a few faint, brownish spots about the orbits and forehead, and one over the right zygoma covered with dry, adherent scales. These lesions bore considerable resemblance to those on her son's face, but also resembled those often seen on the face of old persons.

Every element of the patient's disease has been described,

and as the clinical history speaks for itself, it is scarcely necessary to call the attention to any special feature. The age at which the trouble appeared to have begun and the time of appearance of the "new growths," as well as the age which the patient attained, with the disease, are remarkable. The want of aptness of any particular title for the disease is shown by the numerous names which we find given it by different authorities. I leave it to some master of descriptive titles to suggest a thoroughly suitable name for this class of cases.

330 Equitable Building.

Society Transactions

NEW YORK DERMATOLOGICAL SOCIETY.

225TH REGULAR MEETING.

DR. ELLIOT, *President, in the Chair.*

Case of Syphilis with Unusual Location of the Primary Lesion upon the Hard Palate. Presented by DR. MORROW.

DR. MORROW had seen the case for the first time in his clinic that afternoon. He presented an ulcer on the hard palate, a little to the left from median line, about the origin of which nothing could be learned, except that it had developed two or three months previously, with an enormous tumefaction of the submaxillary glands on the left side; lately a maculo-papular syphilide had appeared upon the chest and extremities, and was now plainly visible.

DR. TAYLOR said that the lesion on the hard palate did not look like a hard chancre of the mucous membrane, but rather like a late ulcerating lesion. With the absence of a clear history and insufficient opportunity for the inspection of the sore, he would leave the decision in doubt.

DR. FORDYCE remarked that the sore looked very much like a gumma, but the appearance of other symptoms seemed to leave little doubt that it was an initial lesion.

DR. MORROW had been himself in doubt about the character of the lesion, and had looked assiduously for some other lesion, which would explain the swelling of the glands, but could not find any, nor were there any symptoms anywhere else on the patient which could be accepted as the primary lesion. The papular eruption on the body had appeared about one month ago, previous to that time the patient was sure that he had never had any lesions on the body; the sore in the mouth had developed in December. The appearance of the ulcer on the palate was much more suggestive of a gumma than of a chancre, but it would be very unusual to have a gumma

develop simultaneously with a papular syphilide, and then, again, the initial lesion would be left in doubt.

In answer to a question of DR. ALLEN, Dr. Morrow stated that the swelling of the glands had reached its large size since about two or three weeks; within the last week it had largely increased, as the patient thought in consequence of a cold. He had had no similar trouble before.

Case of Syphilis with Unusual Features.—Presented by DR. ALLEN.

The patient came to the City Hospital about two months ago with what appeared to be a chancroid under the prepuce and a greatly inflamed and enlarged penis. A dorsal incision revealed an ulcer with no marked induration, of phagedenic character and extensive sloughing reaching very far upwards, almost to the symphysis. He was treated locally. After two weeks pustules began to develop on one side of the face and forehead, which gradually extended over the neck, back, chest, and after two weeks reached the lower extremities. A high temperature during the eruption of the pustules and the appearance of the lesions themselves for a few days was so suggestive of variola that the patient was isolated on the recommendation of the Board of Health. The pustules developed later into rather deep ulcerations with considerable sloughing. The eruption at first was so unusual for a first eruption of syphilis, that the diagnosis seemed doubtful for some time. Most of the ulcers have now healed, leaving smooth, elevated scars of the character of keloid. The throat of the patient had shown extensive ulceration at one time without very characteristic features. Dr. Allen was anxious to hear the opinion of the members present, whether the diagnosis of syphilis could be made from the present appearance of the patient.

DR. TAYLOR stated that he would at once make the diagnosis of syphilis. He had shown before the Society years ago a beautiful case of keloid after a pustular syphilide, consisting of circular hyperplastic cicatrices. The interesting feature of the case was the pustular form of the precocious malignant syphilide. He would expect to see within a year the cicatrices become depressed and, as he always had observed, the disappearance of these hypertrophic scars. In one case of such cicatrices, that of a lady, he had observed the occurrence of a burning pain in the lesions, which, however, disappeared afterwards.

DR. BRONSON had already seen the case before at an earlier stage of the disease. The suppuration process was then something remarkable, the pustulation exceeding anything he had seen before in syphilis. The pustules were very large and but for their characteristic grouped arrangement would scarcely have been taken for efflorescences of syphilis. This arrangement, however, together with the ulceration in the throat (which was of a phagedenic character) and the sore on the penis with adenopathies, made the diagnosis sufficiently clear. He, also, would regard the present appearances as characteristic of syphilis.

DR. MORROW would pronounce the case of one syphilis without the slightest hesitation. In variola the lesions would not show such a diversity in size nor come out in successive crops.

DR. FOX thought that the case was a typical syphilide representing the ecthymatous form of the large flat papular syphilide, the infiltration being perhaps somewhat more dense than usual. He had sometimes seen

this papular eruption assume an annular shape. The lesions he thought would disappear leaving little if any mark upon the skin.

DR. FORDYCE thought that it was possible that the phagedenic character of the lesion and the increased suppuration might have depended on an increased formation of toxins over that in ordinary cases of syphilis. In cases like the one presented the effects of mercury might not be so beneficial as that of the iodides.

DR. LUSTGARTEN had no doubt of syphilis from the present appearance of the case; the precocious malignant eruptions were not of very frequent occurrence. We did not know exactly what caused them; all explanations had been merely hypothetical. The pustular character of the syphilitic eruption suggested the presence of another infection besides that with the syphilitic virus.

DR. SHERWELL could not think of anything else but syphilis. He agreed with what Dr. Morrow had said in regard to the size of the cicatrices in the differential diagnosis as to variola.

DR. ALLEN stated that it was only for a few days that he had been in doubt about the diagnosis. There seemed to exist a certain connection between phagedenism and the suddenly appearing pustular process on the skin, which he thought due to some other virus than that of syphilis—to a mixed infection. He hopes to have the opportunity of watching the patient in the future and to study the changes in the keloid lesions.

Case of Unilateral Lentigo of the Face, Probably Congenital.—DR. FORDYCE presented a girl 10 years of age with this lesion, who besides had atrophy of one leg in consequence of poliomyelitis anterior. He showed besides a picture of a similar case in a French publication (*Nouvelle Iconographie de la Salpêtrière*, Vol. I., 1888), this patient having been a sufferer from epilepsy.

DR. FOX was much interested in the case itself and particularly in the picture shown, as the latter was an exact duplicate of a case, a young woman, about twenty-five years of age, apparently in perfect health, and of whose case he had a photograph.

Case for Diagnosis.—DR. SHERWELL presented a patient, Chas. H., born in United States, 57 years of age, engaged in electro-mechanics, a veteran of the war. He had always enjoyed good health up to the Summer of 1892, when an eczematous eruption appeared on the arch of the instep of both feet, of a very itchy and troublesome character. Gradually patches of the same eruption crept up on the limbs, invaded the arms, then the lower portion of the trunk, groins, scrotum, anus, etc., in order. He was treated by Dr. Parmelee, of Ansonia, Conn. Dr. S. saw the patient first on February 20, 1893. He gave Startin's anti-rheumatic mixture, and mild doses of calomel, an ointment of cold cream, and one of resorcin and salicylic acid in cold cream with some benefit; he saw him again on March 20th, when he prescribed a lotion of carbolic acid with oxide of zinc and aqua Calcis, also a lotion of carbolic acid and soda about the same proportion, and mild mixed treatment. By a letter to his physician, who had written that this disagreed with him, he put the patient on dilut. nitro-muriatic acid, nuxvomica and Donovan's solution, which appeared to agree with him, afterwards and coincidentally giving him cod liver oil internally and externally

up to April 12th, when it began to distress him. Locally he had lately used a mixture of tar with lard, by lay advice, without benefit.

The ferocity and persistent intermittence of the pruritis in the case and some of its objective features seemed to be above what was usual even in a bad case of general eczema; he had chills of a mild character, but not enough pronounced or of the same character as those of malarial origin. He had brought the patient here, thinking some member might have suggestions for treatment. He had thought of the possibility of mycosis fungoides.

DR. JACKSON did not think it was a case of simple eczema, but that some other trouble must be behind it, which he could not say without further examination.

DR. BRONSON did not consider the case one of eczema, but thought that probably some disease affected the lymphatic apparatus.

DR. FOSTER was of the same opinion as Dr. Bronson, that a deeper lesion than eczema was present.

DR. TAYLOR thought that there was present in the case an erythematous condition such as is not rarely seen in albuminuria. It was not exactly a rare condition, but not an eczema; there existed an extensive œdema. He would have the urine examined for several weeks, with thorough application of the microscope, and have the heart carefully examined.

DR. LUSTGARTEN considered the case as a constitutional disturbance due to either an embolic or an inflammatory process of the heart or to albuminuria, as suggested by Dr. Taylor.

DR. CUTLER also called the condition an erythematous one, often associated as in this case with a certain amount of cellulitis, not uncommon in kidney affections. He considered general treatment, rest in bed, etc., advisable.

DR. SHERWELL called attention to the fact that the condition extends over the arms and almost the entire body, and is not confined to the lower extremities, as some of the speakers seemed to believe.

DR. FOX considered the condition originally of eczematous character, complicated by an affection of the lymphatic vessels, due to some local absorption; the lymphangitis might extend much farther than the original local affection.

DR. SHERWELL had first taken the affection for a generalized eczema. In answer to remarks of some members he stated that the urine had been examined for albumen and sugar for a period of almost three months without results, likewise the heart, which was apparently normal. The disease was accompanied by subjective symptoms, chills and intense pruritus, much exceeding common eczema, so that the sleep was greatly disturbed. He agreed with several of the gentlemen that the lymphatics were certainly affected; he had considered the possibility that it was a preliminary condition of mycosis fungoides. Startin's mixture seemed to be followed by some improvement.

Case of Bullous Eruption of the Neck, Chest, and Axillæ for Diagnosis.

—DR. CUTLER presented a patient with the following history:

The patient, a Russian Pole, 46 years of age, was perfectly well up to two weeks ago, when a redness and swelling of the face appeared, accompanied with headache, fever and chills. In two or three days the redness spread from the face to the neck and chest, accompanied with intense burn-

ing and itching of the inflamed skin. Since then the eruption has gradually spread, not continuously but in patches over the trunk to the lower extremities. Within the past week large bullæ have appeared on all the erythematous patches except on the face. Although the man has suffered continuously with some fever and great annoyance from the itching and burning of the skin, his appetite and general condition remain good.

DR. ALLEN considered the case one of beginning pemphigus and expected it to soon spread over the body.

DR. LUSTGARTEN thought it was impossible to make a diagnosis without further observation; the disease seems to be of a benign character. The patient, it appears, has had erysipelas, so that it possibly was a drug eruption, perhaps from iodide.

DR. FOX also believed it might be an eruption from iodine.

DR. JACKSON did not consider the case one of pemphigus, but of iodic eruption.

DR. BRONSON thought it would be rash to call the case one of true pemphigus, although the lesions were decidedly pemphigoid and differed little from those of pemphigus pruriginosus, which often begins with urticaria.

DR. MORROW said that the bullous form of iodic eruption usually differed by its localization on the face, hands and forearms and presented different objective characters; he, therefore, could not agree with the gentlemen who had spoken of iodine eruption.

DR. SHERWELL asked whether the iodine eruption did not usually show a semi-solid infiltration, and not a true bleb; in some instances he had seen this was the case.

DR. KLOTZ said that the rather sharp line of demarcation around the neck suggested a dermatitis venenata resulting from the local influence of some drug.

DR. CUTLER stated that he had seen the case but once before, about a week ago, when he presented an erythematous condition on the face; on the shoulders there were wheals and erythematous patches of various shapes and sizes; many have a ringed appearance but at that time no bullæ were visible, except a few upon the neck. Since then bullæ in large numbers had developed. The erythematous condition certainly prevailed at first, with increased temperature and itching. He did not make the diagnosis of pemphigus, but rather of erythema bullosum.

Case of Morphœa.—DR. SHERWELL presented a patient, Miss A. B., 32 æt., born in United States, of good family history. She gave no history of previous disease of any kind except exanthemata of childhood. About August, 1892, the lesion was first noticed in the shape of a white, waxy spot with slightly pinkish border or areola. Consulted a physician first in January, 1893, who prescribed a lotion, virtually a placebo, which was used only a few times. Since about that time the lesion has gradually begun to disappear without any treatment and to present a white, well-defined spot relatively free from infiltration. He specially wished Dr. Taylor's opinion, as in site and appearance it so nearly resembled his recently published cases of "Localized idiopathic atrophy of skin," whether or not it was identical with them. There seemed almost too little change of tissue in first stage for ordinary morphœa.

DR. MORROW agreed with the diagnosis. He thought that in all cases

hypertrophy preceded the atrophic stage of morphœa. The case did not in all respects corresponded with typical cases of morphœa.

DR. TAYLOR. would suggest the removal of a piece for examination ; the lesion looked very much like the case of atrophy which he had published, but lacked the violaceous hue that had been distinctly present in his own case.

DR. BRONSON thought it was a case of circumscribed neuropathic atrophy rather than morphœa, which is more of a circumscribed scleroderma.

DR. FOX said that the diagnosis of morphœa was satisfactory to him.

DR. FORDYCE considered it as localized atrophy rather than morphœa. In morphœa a marked infiltration was present, while in this case there was rather an atrophy of the cutaneous tissues.

DR. ELLIOT would make the diagnosis of morphœa in this case. The features of morphœa were not strictly uniform. In some cases the lesions were soft, in others more like scleroderma ; the border in some violaceous, in others pink, etc. He had under observation a case, which he had hoped to present to the Society to-night, in which several hundred patches were distributed over the trunk. The disease had developed during the last five years and all stages were now present on the man, from the fresh elevated circumscribed patch to the one already entirely atrophied. In his opinion it was a case of circumscribed scleroderma, or, as it is usually called, morphœa.

DR. SHERWELL had at first looked upon the case as one of atrophy, resembling Dr. Taylor's case, but on later examination the history seemed to point clearly to some infiltration, although, as he had said, he had not observed the waxy appearance which other cases of morphœa had distinctly presented. He hoped to get a piece for examination to decide the question.

Case of Lupus Erythematosus Disseminatus of the Face with Some Uncommon Features.—DR. LUSTGARTEN presented the patient, a young woman. The lesions had been present since about two years, having developed into the present condition in six to seven months, but had not changed much, in spite of treatment by several gentlemen, among them Dr. Fordyce. The marked infiltration of some of the patches and the absence of any peeling or scaling were the unusual features of the case. He had used mercurial plaster and ichthyol, but it had looked as if what little change there actually could be noticed was spontaneous rather than due to the treatment.

DR. MORROW stated that he had presented the same patient at a previous (215th) meeting of the Society as a case of lupus erythematosus (not for diagnosis, as reported in the transactions). He had applied carbolic acid to the patches without any material effect. He could notice that some of the lesions had since extended. The spontaneous disappearance at several points was a peculiarity of the disseminated form of lupus erythematosus.

DR. FOSTER was interested to hear what results Dr. Lustgarten had received from ichthyol.

DR. FORDYCE said that the infiltration in this case was much harder than usual. He did not believe that the features of the affection sufficiently resemble those of either of the two varieties of lupus erythema-

tosus. He was of the opinion that two or more distinct affections were at present included under the designation of lupus erythematosus. In the form ordinarily met with upon the cheeks and nose the infiltration was frequently quite soft and could easily be scraped away with a sharp curette, while in the discoid variety the new growth was hard and not easily removed in this manner.

The case presented by Dr. Lustgarten corresponded in some of its features to the multiple discoid variety of the affection, but in other respects it appeared to be an undescribed skin disease.

DR. LUSTGARTEN was himself somewhat doubtful about the nature of the disease on account of the unusual features. Ichthyol had no marked effect on the lesions.

A Contribution to the Histology of One Phase of Eczema Seborrhoicum.—The President, DR. ELLIOT, read a paper with this title.

DR. BRONSON agreed with the conclusions drawn by the author, particularly with that that eczema seborrhoicum was a catarrhal disease. He asked whether the vacuoles described in the paper had nothing to do with the formation of vesicles?

DR. FORDYCE said that, not having made any microscopical studies of the subject himself, he was not prepared to discuss the paper. He doubted, however, whether the so-called seborrhœa capillitii was always a parasitic disease; it was much too frequent and certainly in a large number of cases showed no tendency to get worse or to spread. He was inclined in some instances to attribute it to a chronic gastro-intestinal affection rather than to a local cause.

DR. LUSTGARTEN said that the author, as he understood him, confined the name of eczema seborrhoicum to the lesions found on the sternal region. Unna's paper certainly marked some progress in dermatology, but had been the cause of much confusion, as he had extended the name to different clinical types of supposed parasitic eczema.

The affection as mentioned by the author was not a new one. Dr. Elliot certainly had proved that it is not a real seborrhœa. He had himself not made any examination, but in preparations of Unna which Dr. Elliot had shown him he could not see the fat in the rete as described by Unna. What Unna took for fat he believed was pigment stained by osmic acid.

DR. SHERWELL said he felt that, as a non-histological expert, it seemed like presumption to criticise; but still he must contend that he had never seen a case ordinarily recognized by the term without some apparent macroscopical evidence of fatty hyper-secretion or what resembled such. He thought it would be highly interesting to have some expert physiological chemist examine the crust, etc., for the percentage of fatty acids. The ages of the patients most frequently affected, the frequency of this disease in children, in whom the hair follicles and appendices are generally in a state of greater activity and excitement, the site, etc., seemed to render the participation of the follicles and sebaceous glands very probable.

He therefore would not accept all the writer's conclusions, even though from his lesser technical, microscopical and pathological ability he was unable to combat them.

He still thought the term seborrhœa would be retained for these conditions, even if they were not literally true (and he could not be sure of this).

One other thought had occurred to him in view of the writer's opinion of the parasitic nature of the affection, and that was this: in view of the large number of sections examined the author had not some decided opinion on the specific microbe causing it.

DR. ELLIOT said, in answer to Dr. Sherwell, that lenses were not the especial means of discovering micro-organisms. They required appropriate staining and then, if any were found, it was necessary to prove that they were pathogenic. This having been done, it was, furthermore, necessary to prove that the organisms present in any tissue were the cause of the pathological changes. All of these steps could not be carried out by the microscope, but involved an enormous amount of work and much time, which could be better done by the bacteriologist than by the microscopist. He would remind Dr. Sherwell that Unna and Pellizari had found fifty-four varieties of micro-organisms in connection with seborrhoic eczema, some pathogenic and some non-pathogenic. Which of these were the cause of the disease was not yet determined and probably would not be for some time.

In answer to Dr. Bronson the author stated that the vacuole formation in the rete was not the first step in the formation of a vesicle, but simply indicated a nuclear degeneration, which was not peculiar to eczema seborrhoicum, but existed in many different conditions inflammatory in character. The same degeneration was seen in epithelioma, in irritated venereal warts and in many other epidermoidal diseases.

In regard to what Dr. Lustgarten had said, Dr. Elliot would state that he would not confine the name of eczema seborrhoicum to the phase which appeared in the sternal region, but he would extend it to the various phases of the disease occurring on other surfaces. He regarded the process as *one* form of parasitic eczema, not, however, including all other parasitic eczemas, but as one which had a certain peculiar mode of origin, extension and course. He had treated over one thousand cases of the disease, had found that its first symptoms invariably developed upon the scalp, and from thence had progressed downwards, having certain favorite points of localization. This had likewise been the rule in every case, when the clinical symptoms had been present on the sternum, and he would point out that if this rule must be considered as only an "accident," then we had better do away with all nosological laws. From the study of the phases of the disease, histologically as well as clinically, he could not find any reason for not regarding them pathologically a form of cutaneous catarrh.

He would, in conclusion, point out the absolute want of any basis for the constitution of such a disease as "seborrhœa sicca." Not a single adherent of it has ever proved its existence, its right to be considered as existing; but its life has depended upon the personal dictum and the presence of fat in epidermis scales. As a disease it is made up of the most heterogeneous pathological conditions, some as widely differing as a clavus and an urticaria, and its name should be completely erased from dermatology. He could not understand why Dr. Piffard did not inveigh against it as strenuously as he did against that of eczema seborrhoicum.

DR. PIFFARD said he did not accept the term seborrhœa sicca; the presence of 95 per cent. epithelial matter in the scales sufficiently indicated that the affection could not be considered an overproduction of fat.

THE NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY, APRIL, 1893.

DR. SAMUEL ALEXANDER, *President, in the Chair.*

Syphilitic Orchitis.—DR. F. TILDEN BROWN presented this case. The patient, a man aged 22 years, had a venereal ulcer in 1888, for which he was treated at the Charity Hospital. One year later he had an attack of gonorrhœa. In July, 1890, he became infected with syphilis, followed by adenitis on the left side and a general secondary eruption. His right testicle then began to enlarge, and it was removed about eighteen months later in Sing Sing Prison. The man's left testicle began to enlarge four months ago. He states that his sexual powers are in no way impaired. Dr. Brown presented the case as a typical one of syphilitic orchitis.

New Instruments.—DR. JOHN A. FORDYCE presented a rubber cap, after the pattern of one devised by Dr. Oberlaender, for urethral dilating instruments. The cap prevents the mucous membrane from being caught between the blades of the dilator, and does not at all interfere with the efficacy of the instrument.

Hypertrophy of the Bladder and Prostate.—DR. JAMES R. HAYDEN exhibited a pathological specimen consisting of the bladder and prostate. There was marked hypertrophy of the walls of the bladder and the median portion of the prostate. The case was an interesting one, Dr. Hayden said, as it illustrated how easily the enlarged lobe might have been removed if the condition had been discovered before death.

Uro-Genital Blennorrhœa in Children.¹—DR. H. KOPLIK read a paper on this subject, and exhibited a number of microscopical preparations.

DR. J. A. ANDREWS said that for a number of years he has been interested in the bacteriological investigations of this subject, in connection with purulent ophthalmia, especially in the new-born, and he has recently reached the conclusion that in the majority of such cases the condition is not due to gonorrhœal infection. Last year he investigated eighty-four cases of purulent ophthalmia occurring the second or third day after birth, and only two of these were of gonorrhœal origin. In the other cases the clinical picture did not at all correspond with that of gonorrhœal ophthalmia. Dr. Andrews stated that he has never succeeded in positively cultivating the gonococcus of Neisser. Some years ago he reported that he had inoculated a human eye from what he then believed to be the seventh generation of a culture of gonococci, producing a violent purulent inflammation. Whether this inflammation was gonorrhœal or not, he is not prepared to say, as so many errors have been made regarding the identification of the true gonococci. Dr. Koplik's paper well illustrates how difficult it is to recognize this microbe. Neisser himself has never succeeded in cultivating it.

DR. ANDREW F. CURRIER said we must admit that the etiology of gonorrhœa has proceeded very decidedly from simple to complex lines, and the indications which seemed so plain at the beginning of the new era inaugurated by Neisser are becoming much obscured. The difficulties of arriving

¹ See pages 219 and 263.

at a definite conclusion have been clearly set forth by Dr. Koplik in his paper. There are several varieties of pseudo-cocci, which, to the unpracticed eye, may easily be mistaken for the genuine gonococci, and this naturally tends to shake our confidence in this as a means of diagnosis. We are still obliged to depend largely upon the clinical manifestations of the disease for a diagnosis, especially in women. In children it is often very difficult to decide as to the origin of such inflammatory conditions. In that class of children in whom discharge from the genitals is most common—those of the poor and unclean—the habits and surroundings are such as to favor the development of micro-organisms. True gonorrhœa in young children, Dr. Currier said, is quite rarely due to direct communication. It occurs rather in consequence of the careless manner of handling the parts, and the herding together of the family. When the question of infection through violence arises, we must depend largely upon the microscopic examination; in such a case it would be hardly fair, from the clinical manifestations alone, to determine a diagnosis which would perhaps prove to be a very serious matter to the individual against whom the charge was preferred.

As regards the treatment of the disease in female children, Dr. Currier said he has found it very unsatisfactory. The children are very restless, and it is difficult to get at the parts. It may be necessary to place the child under an anæsthetic. Stretching the parts and introducing a tamponade he has found answered in some cases. Such treatment he has found to be more effective than that by irrigation or penciling. To cure the urethral inflammation in girls, we must depend on internal medication ordinarily. In these cases the vagina is first infected, and the external genitals become affected secondarily.

DR. OGDEN C. LUDLOW said he could only discuss this subject from a clinical standpoint, as he has made no bacteriological investigations regarding it. In looking over his records, he has found that out of a total of over ten thousand cases of diseases of various kinds among young children there were only thirty cases of vulvo-vaginitis in female children; in these the discharge was thick and greenish in color, and the cases ran the ordinary course of a gonorrhœa. Clinically, it was impossible to distinguish them from true gonorrhœa. In two of the cases, at least, the infection was undoubtedly gonorrhœal, as the children slept in the same bed with their parents, both of whom at that time were being treated at the dispensary for gonorrhœa.

DR. F. R. STURGIS referred to the difficulty and uncertainty that surround the bacteriological investigations in these cases, making the conclusions drawn from them of comparatively little practical value. It would be interesting to ascertain just how far the gonococcus of Neisser is the cause of gonorrhœa. It has been found present in some cases where there was no discharge, and this suggests that it requires a certain condition of the system or mucous membrane to develop it. As regards treatment, Dr. Sturgis said that by means of silver nitrate has thus far certainly produced the best results.

DR. H. GOLDENBERG said that Neisser could not cultivate the gonococcus because he did not have the proper media. His experiments, however, were very conclusive. Wertheim made cultures in blood serum and simple agar.

DR. JOHN A. FORDYCE spoke of the possible toxic properties of the gonococci. Many of the complications of gonorrhœa, among them ophthal-

mia and arthritis, may be due to the toxic properties of the bacteria. Possibly, in some instances, the epididymis may become infected through the blood. This method of toxic infection from the gonococci, Dr. Fordyce said, is very probable, but it must still be regarded as hypothetical.

DR. GEORGE E. BREWER referred to the uncertainty that surrounds the etiology of many cases of discharge from the genitals, especially in young girls. He has always gone on the basis that where the lesions in the vagina were especially severe, with co-existing urethritis, a gonorrhœal origin was indicated. The treatment of these cases he has found extremely unsatisfactory.

DR. F. TILDEN BROWN said that in making microscopical examinations of the secretions from the genitals he has often met with so many forms of diplococci as to make him uncertain whether the cases were of specific origin or not. Further investigations in this line, he thought, will clear up this uncertainty and show the real value of Neisser's discovery.

DR. KOPLIK, in closing the discussion, said that the experiments of Wertheim, who isolated the gonococci in colonies, are far in advance of anything else that has been done in this direction. Wertheim produced gonorrhœa in paralytic subjects with gonococci isolated from a case of salpingitis. In reply to a question, Dr. Koplik stated that he applies the silver nitrate solution once daily for about a week, then every other day, and then twice weekly. Marked improvement usually follows this treatment.

THE NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY. STATED MEETING, TUESDAY
EVENING, MAY 9, 1893.

DR. SAMUEL ALEXANDER, *President, in the Chair.*

A Case for Diagnosis.—By DR. F. TILDEN BROWN.

The patient was a man aged 30 years, who presented himself on March 11th last, complaining of pain in both inguinal regions, which he had noticed two days before. There was decided tumefaction on both sides, and the right side was extremely painful. The man's last sexual exposure had occurred twenty-eight days before the onset of the pain. A distinct induration was noticed in the glans penis, on the left side; it felt as though a small button was turned on edge just within the urethra. On exposing the parts little could be seen excepting a superficial excoriation of the mucous membrane of the urethra. In addition, the left lip of the meatus was bluish-red in color and œdematous; there was a slight viscid, translucent discharge. It seemed to him at the time, Dr. Brown said, that he had to deal with an intra-urethral chancre. The inguinal glands became more enlarged. At the proper time these were opened, the pus evacuated and the abscess cavities injected with a ten per cent. solution of iodoform oil. The wound on the right side healed rapidly, but on the left side the result was not so satisfactory. The purulent discharge continued and a free incision was made, which disclosed the fact that the peri-glandular structures were more involved than the glands themselves. The edges of the wound became raised and uneven and several sinuses developed. The condition was thought to

be due to a mixed infection. During this time the induration at the point which was regarded as the initial lesion remained about the same. The discharge became more purulent—never profuse. The point of induration then increased in size until it covered the greater portion of the inner surface of the left lip of the meatus; it was depressed in the center and had a few small bleeding points. Its borders were not raised. The opposite wall of the urethra became eroded, but there was no induration. It is now two months since this lesion appeared, and the patient has failed to present any evidences of systemic infection, no throat symptoms, no eruption. A slight amount of induration at the seat of the original lesion still remains; the induration in the inguinal regions has entirely disappeared.

DR. R. W. TAYLOR said he did not consider the case one of syphilis. The condition in the groin was typical of chancreoidal bubo.

DR. JOHN A. FORDYCE said that while the man presents no symptoms of syphilis now, that disease is not positively excluded by a long period of incubation after the appearance of the initial lesion.

DR. E. FULLER thought the infection of the glands was due to an old urethral inflammation.

DR. BROWN said the man had an attack of urethritis two years ago. He felt satisfied now that the lesion was not an intra-urethral chancre. It is one of those cases which so easily mislead the physician and strongly suggest syphilitic infection. The lesion may have been of the nature of herpes.

THE CHAIRMAN stated that with an intra-urethral chancreoid the lesion would have been much more destructive than this one seemed to be. Both chancreoid and chancre can fairly be excluded. The lesion seems to have been one of those infectious lesions to which we cannot give any specific name.

Seminal Vesiculitis,¹—By DR. E. FULLER.

DR. E. L. KEYES said he had seen most of the cases referred to by Dr. Fuller in his paper, and could corroborate the statements made regarding them. In one case coming under his observation he was particularly impressed with the value of this method of draining the seminal vesicles. The patient was a man who complained of frequent urination and other symptoms not distinctly referable to the seminal vesicles. He fell into the hands of a number of surgeons, who treated him for posterior urethritis, etc. Afterwards a perineal section was made and the man was kept in bed for six weeks, but his symptoms did not improve. He then came under Dr. Fuller's care, who cured him by this process of "milking" the seminal vesicles.

The symptoms of seminal vesiculitis, Dr. Keyes said, are irregular and very difficult to classify. In one case of epithelioma of the seminal vesicles that he has seen the symptoms were those of intense irritability. When the vesicles are considerably distended the symptoms generally complained of are weight, heat and tenderness, usually felt more on one side than the other. In the chronic cases, however, these local symptoms are wanting. In obscure cases of urethral trouble which do not respond to well-directed treatment we should always make a careful exploration and find out whether these vesicles are distended or not. The best way to do this is with the

¹ See page 333.

finger. Some of the good results that have been obtained in obscure cases of this kind, by fussing with the rectum or by the so-called "massage of the prostate," are no doubt due to the fact that the over distention of the seminal vesicles was relieved. It should be borne in mind that by this "milking" process a swollen testicle may be produced. In a certain class of patients—flabby individuals who have been excessively sexual and who are beginning to lose their power—there seems to be a continual over-secretion, without any inflammatory condition being present. In such cases no permanent benefit is derived from this "milking" process.

DR. R. W. TAYLOR referred to the fact that with these cases of seminal vesiculitis there is usually a complicating posterior urethritis. The fact should also not be lost sight of that massage of the prostate may produce an epididymitis and cause serious disturbances in the posterior urethra. In some acute cases he has seen beneficial results from the combined use of ergot and nux vomica. An important symptom in these cases is acute pain directly over the sacrum. The patients also complain of pain in the inguinal and perineal regions.

DR. GEORGE E. BREWER narrated a case which came under his observation two years ago at the Roosevelt Clinic. It was not then recognized as one of seminal vesiculitis. The patient was a sexual neurasthenic and was absolutely impotent. He had from eight to twelve emissions daily; they were brought on by the merest suggestion. Frequently an emission was produced by seeing a woman raise her dress slightly on the street. Various methods of treatment were employed in this case without effect. The urethra was dilated with sounds, the deep urethra was treated, the bladder was washed—all without effect. One day, at the clinic, the patient had an emission produced by a woman screaming in the next room. The material passed by him consisted of a gelatinous fluid, such as described by Dr. Fuller; it coagulated very quickly and contained a few spermatozoa. The patient was afterwards treated by daily applications of electricity, a small electrode being devised which was passed into the prostatic urethra, the other electrode being placed over the spine. Under this treatment he rapidly regained his sexual power. Dr. Brewer said that possibly this electric current, which passed through the prostate, produced a contraction of the muscles; certain it was that nothing else did the man any good.

DR. JAMES P. TUTTLE stated that he has in a number of cases quickly relieved the symptoms of acute seminal vesiculitis by the application of cold irrigation to the rectum. Cold rectal injections do not answer the purpose; the irrigation must be prolonged.

DR. FULLER said that a writer in St. Petersburg reports favorable results by treating these acute cases by means of ice applications to the rectum.

DR. TUTTLE thought that the cold irrigations would be less irritating than ice.

THE CHAIRMAN stated, in regard to the etiology of acute vesiculitis, that while gonorrhœa is its cause in many instances, it may exist in patients who have not had gonorrhœa. In his opinion it is not due to an infection by the gonococci. Sexual excitement is increased in a certain proportion of cases, but in many instances there is no change in the sexual function.

DR. F. TILDEN BROWN referred to the presence of inspissated masses of gelatinous material in the urine of these patients. They are cast-like in

appearance and vary considerably in size. He also referred to the relapsing attacks of epididymitis, of a sub-acute type, occurring in connection with cases of visiculitis.

DR. FULLER, in closing the discussion, stated that he has often noticed the rounded, gelatinous masses referred to by Dr. Brown in the urine of these patients. They are composed of vesicular material. They are striated and contain a few spermatozoa and epithelial cells. Relapsing epididymitis is not uncommon in connection with these cases. Pain on ejaculation may be very intense.

Gonorrhœal Rheumatism and Its Treatment.—DR. R. GUITERAS read a paper on this subject.

He first gave the history of gonorrhœal rheumatism and discussed the various theories that have been advanced regarding its etiology. It occurs as a complication of gonorrhœa in from two to three per cent. of those suffering from the disease. It generally occurs in men. Age has no influence. It is not necessarily connected with a urethritis, but may result from gonorrhœa of the vulva, vagina and conjunctiva. Authorities differ as to the period at which the complication makes its appearance. Fournier states from the sixth to the fifteenth day; Roustan, not before the third week; others claim that it is a complication of posterior urethritis or that it appears only in older cases. The favorite locations for its manifestation are the knee, the ankle, the shoulder and the fingers and toes. The diagnosis is usually not attended with much difficulty. The disease occurs during an attack of gonorrhœa and follows its course, being governed by its exacerbations and remissions. There is a tendency to recurrence on fresh infection. It is less acute than rheumatism, and although it may begin acutely, it soon changes to a sub-acute or chronic state.

The following classification of the disease has been made by Finger :

(1) Articular. This is either mono-articular or poly-articular. The mono-articular form may be acute (arthritis) or chronic (hydrarthrosis). The poly-articular may be acute, sub-acute or chronic.

(2) Periarticular (Nodose).

(3) Synovitis tendinum.

Of the above the acute mono-articular form (arthritis blenorrhagic) is the most frequent. It begins acutely or is preceded by a prodromal stage of malaise and tenderness in several joints, followed by a rapid onset of the arthritis. Pain may be very acute or moderate; œdema, redness, tension, distinct fluctuation, marked elevation of temperature. The swelling develops rapidly. The pain and fever disappear in a few days, leaving a painless exudate, tending to pass into a hydrarthrosis. This generally disappears in a few weeks. Occasionally, however, it terminates in suppuration. In such cases we have chills and increased temperature during the acute stage, followed by pain, œdema, throbbing, etc. The capsule ruptures and the pus oozes out between the muscles and tendons. This may result fatally in pyæmia or recovery with ankylosis. Amputation or resection is at times required.

Among other conditions occasionally complicating a blenorrhagic rheumatism are endocarditis, pericarditis, various skin eruptions, generally purpuric in character, and certain eye complications, as iritis, aquo-capsulitis and conjunctivitis. Also bursitis, *piéd blenorrhagique* and complications

of the nervous system, such as neuralgia, hyperæsthesia, anæsthesia, cramps, atrophy of muscles, increased reflexes, etc.

As regards the treatment of gonorrhœal rheumatism, Dr. Guiteras said it is varied and generally very unsatisfactory. Of the salicylates, he has found salol the most efficacious. Phenacetin is valuable to quiet the pain. The oil of gaultheria is of value both in the acute and sub-acute stages. A good way to prescribe it is in doses of from five to twenty drops in milk every two hours. Colchicum and the alkalies are also of service. Of the internal anti-bleorrhagics, copaiba, cubebs and the oil of sandalwood are all good on account of their action through the urine on the urethral mucous membrane. Local treatment of the urethra seems to aggravate the rheumatism rather than benefit it. General tonic treatment may be indicated. Local treatment of the joints by counter-irritation, blisters, Paquelin cautery, ichthyol ointment (50 per cent. in lanolin), absorbents, massage or electricity, all exert a beneficial influence. Potassium iodide or mercurial ointments applied over the joints are of doubtful value. Leeches or poultices have a good effect in the acute stage. Cold applications are also very grateful to the patient during the acute stage in the mono-articular variety of the disease. When pus has formed in the joint and pyæmia is threatening, surgical treatment should at once be undertaken.

On the Occurrence of Tertiary Lesions of Syphilis as the Result of Direct Local Infection, with General Remarks on Syphilis as an Infectious Disease.¹—DR. H. G. KLOTZ read the closing paper of the evening with this title. It was suggested that the discussion on the paper be postponed until the following meeting.

Selections.

Remarks on Diabetes and Gout. GEORGE HARLEY M. D., ETC. (*British Medical Journal*. May 27, 1893.)

It is due to this author's researches published as early as 1865, that much of the improvement in treatment, and clearer knowledge of the ætiology of diabetes has been arrived at. He makes five nosological divisions of the subject: hepatic diabetes, including the gouty variety; cerebral diabetes, including all cases of saccharine urine arising from nervous derangements; pancreatic diabetes, the most deadly of all forms; hereditary diabetes, not uncommon; food diabetes; including all forms arising from the ingestion of unwholesome substances. Clinically, with the premise that diabetes, like gout, is a chemical form of disease, he divides all cases into two great groups, diabetes from excessive sugar formations, and diabetes from malassimilation, the familiar classification. In the first class, patients are well nourished and amenable to treatment, in general. Of this, hepatic diabetes furnishes the type. In the second class, pancreatic diabetes is the example, and the patients in this group are "so little influenced by either medicines or diet that the vast majority of them die within a few weeks of

¹ See pages 276 and 304.

its commencement." Here, there is progressive loss of flesh and strength. Harley cites five cases of hepatic disease in which life was prolonged for a quarter of a century or more, where the urine passed was 110 ounces per diem, and sp. gr. 1060, in one instance. The most common cause of diabetes in temperate climes is the habitual use of stimulants coupled with rich food and little exercise, and these conditions being most prevalent among semitic peoples, the disease finds among them its greatest number of victims.

In considering prognosis, the form of disease is, of course, of the greatest moment, and after that, there are certain signs and symptoms, which will give a clue to the longevity in each form. Where there is little loss of flesh the patient may live for many years, while the earliest sign of evil portent is rapid loss of weight. "When acetone is detectable by the perchloride of iron test, the patient usually dies within six months." When the ethereal odor in the breath appears, Harley lowers his calculation of the span of life to weeks. The end is not far off when aberration of intellect and drowsiness come on and finally, when, to these, is added embarrassment in breathing and coma, death is knocking at the door.

The "Hints on Treatment" deserve consideration. Harley begins by putting to rights the organ—liver, pancreas or nervous system—at fault. He recommends plenty of fresh air, exercise within the limits of fatigue, and removal from worry and anxiety. A restricted diet (which he gives in full and which is rather more liberal than the ordinary) is necessary in the form due to over-production. In the second variety, the dietary must be considerably modified, cream, butter and cod-liver oil being administered, and in the pancreatic disease, alkalies, to emulsify the fats. He goes so far as to say that honey and pure cane sugar may here be administered freely to supply the systemic wants. Relax the diet in any case when there exist signs of failure. The use of all alcoholic beverages, fermented or distilled, is absolutely forbidden, except in very exceptional cases. He allows bland liquids, recommending water with a few drops of phosphoric acid to quench the thirst. Among the drugs, in diabetes due to excessive formation, the narcotics and anodynes are most useful, due to their inhibition of hepatic nerve activity. Their doses should not be increased when they fail to affect, but the medicines should be interchanged until that best suited to the case is found. Harley recommends croton chloral highly, always giving it in combination with a vegetable anodyne.

In diabetes caused by nerve depression or pancreatic derangement, extract of *nux vomica* (gr. $\frac{1}{4}$ t. i. d.) in croton chloral pill forms a serviceable agent. Anything that tends to improve the general health is useful in this form.

Saline purgative and alkaline mineral waters, for obvious reasons, are employed in his therapeutics.

JOHNSTON.

On Some Parasitic Protozoa Found in Cancerous Tumors. RUFFER AND WALKER. (*Journal of Pathology and Bacteriology*, Oct. 1892.)

The article begins with a resumé of all the principal work done up to this time on the cancer parasite, from Virchow's first description of the cell changes, in 1851, to Soudakewitch's important paper in March of last year. The opinions quoted are almost as various as the authors themselves, but,

in spite of the inaccuracies in the earlier work, there seems to be a very general belief in the presence of a parasite infesting the epithelial cells running through the whole list of abstracts. Dissenting voices are raised here as everywhere.

Ruffer and Walker's belief is deeply rooted, and their careful painstaking methods and beautiful drawings must carry much conviction with them. Their preparation is as follows: Fixation in Fleming's solution and osmic acid, washing in water for twenty-four hours, hardening in alcohol and cutting after imbedding in paraffin. Biondi's reagent proved much the most useful stain. It makes a differentiation in color between the protoplasm, nucleus and nucleolus of the cell and the protoplasm and nucleus of the protozoon. The staining may be done with methyl green and the Ehrlich-Biondi reagent, leaving the sections in the latter for two hours or more.

More than two hundred specimens were examined from every region, and the authors state that it is often necessary to look through a number of sections before being rewarded by the discovery of a nest of parasite-infected cells. In a large majority of cases the parasite is round with a small nucleus which may be round or irregular, generally lying near the center of the cell. A distinct capsule is present, and, as a rule, the parasite completely fills the cyst in which it lies. The parasites were found in the protoplasm exclusively. The nucleus never contains them but becomes, not infrequently, crescentic from pressure. An infected cell, as a rule, includes only one parasite, though as many as fifteen were found in the same cell. Several may occupy the same cyst. By fusion of cancer cells and the parasitic cyst, great irregular masses with four or more large parasites are found. The protozoa are more numerous in secondary tumors close to the growing edge and in the non-fibrous varieties. The parasite apparently does not thrive in the cell, and no reproductive process could be demonstrated. The infected cells frequently appear normal, but they may finally be converted into "a kind of cyst."

As to the relation of leucocytes to the cells and their parasites, considerable attention is given. The fact that leucocytes wander into the cells has long been known. Once inside, they degenerate, are apparently digested. The opinion of Ruffer and Walker is that, here, as elsewhere, the office of the leucocytes is to destroy the parasite, not to furnish it food (Hauser's theory) nor to exercise any biological properties (according to Klebs). The authors claim to have shown this process of migration up to the point of the total destruction and replacement by the leucocyte of the protozoa. Leucocytes are undoubtedly also concerned in the formation of new connective tissue, which results in the destruction and death of the cancer cells.

A few paragraphs are devoted to the consideration of other structures which might be mistaken for parasites—from endogenous formation, from invagination and various bodies of a degenerative nature, enclosed in the epithelial cells. The definite structure of the parasite prevents mistake in the first, the occurrence in *degenerated parts* of the tumor in the last. The fragmentation of the nucleolus could be traced to the original nucleolus, so another source of error is eliminated.

The article is illustrated by three excellent chromo-lithograph plates.

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COSMETICS.¹

BY

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THE word cosmetic, being derived from *cosmeo*, and meaning "I adorn, I embellish," there seems to be no reason why the study of any drug which may be used for such a purpose should not be scientifically followed. It appears eminently proper that such a study is relegated to the dermatologist, who is called upon often to do something to remedy the external blemishes of mankind.

The use of cosmetics is not necessarily deleterious. Looked at from the point of experience, which any of us here have had, they are beneficial to the body, while frequently they relieve the mind of an ever-present worry. We, as dermatologists, should educate physicians of other specialties in their use, and the general practitioner should be told a few truths which would lead him to disencumber himself of the idea that any and all local applications are injurious, that most blemishes are the act of an irresistible Providence or of a natural breaking out, which, if driven in, might affect dire constitutional calamity. It seems strange that human nature in its demand for assistance should be subject, because of the ignorance of the advice of a family doctor, to the caprice and rascality of quacks

¹ Read before the 17th Annual Meeting of the American Dermatological Association at Milwaukee.

who trust to its gullibility when so many of us know how useful, beneficial and harmless proper cosmetics are.

Under the broad definition of cosmetics, which includes anything for the purpose of beautifying the body, every physician and surgeon is interested in knowing something of them. Indeed it is his duty to remember that he should not stop at a mere cure. This is essentially true of a surgeon, for in plastic surgery so much can be done besides the successful operation itself. The two edges of a wound may heal, but how? Has the line of incision been so made that there will be the least amount of scar tissue, and what becomes of the scar after all is over? These are questions of importance to the patient, but which are seldom thought of by surgeons who are justly ambitious to cure by their operations, while they often forget the general after-effect.

How often we see the result of a highly successful operation for hare-lip in a grown-up man or woman marred by the white raised scar made by the line of incision, and which generally can be removed by the use of electricity. And it seems strange that surgeons do not recognize the fact that the sooner electricity is used after an healed operation the better the result.

The family physician, dealing in glittering generalities, advises his patient to use no cosmetic preparations because in his opinion they do a great deal of harm and very little good. This may be true of patent lotions, which are so commonly used without advice, but it is not true of remedies advised judiciously, and as the result of experience.

From the time of Queen Cleopatra, who wrote a large volume on the subject, to the present day, cosmetics have been used. We may be sure that their use will go on without cessation, and it is our duty to instruct our colleagues what they should know on the subject.

Twenty years ago I listened to Liebreich's lectures on *materia medica* in Berlin. Speaking of the various schools of medicine, he mentioned a volume published in the last century, the "*Dreck Apothecke*," a book describing the use of excrement of man and animals for the cure of all diseases. After many years' search, I have procured a copy of that book and shall really begin my article to-day by modestly referring to its pages for a few cosmetics recommended by the author.

The book is written in an earnest spirit, which shows that the writer believes what he wrote. His references to well-known literature of the past and of his own day, are as numerous as

any of our present articles, which give us pages of bibliography. I cannot help feeling that even to-day, while no one wishes to use the ingredients of any excrement as medicine, yet there is a tendency to fall back upon the juices of animal organs in the treatment of disease or the prolongation of life which smacks considerably of the volume before me.

The title of the book is :

Neu-vermehrte Haylsame Dreck-apothecke Wie nemlich mit Koth and Urine Fast alle, ja auch die schwerste gifftigste Krankheiten and bezauberte Schäden vom Haupt zun Füssen in und aüsserlich, glücklich curiret worden. Fourth edition, 1748, and a part of it which I shall quote from was written in 1696, under the heading "Chapter 21. Vom Schminchen."

TRANSLATION.

Take white snowdrops, as much as you wish, pour water upon them and distil. Then take some of Soliman's seal, as much as you wish, sprinkle the already distilled water upon it and distil again. Then take cow dung, gathered in May, just as much as you wish, shake the double-distilled water upon it and distil the whole again. Finally take white roses and lilies, according to your wish, and distil them with what has already been distilled. Thus you will obtain a fine beautifying mixture.

But still better is the water found upon a fat cow-flake, which, if applied to the skin upon a cloth or sponge, beautifies it wonderfully.

The distilled water from man's excrement gives a fine color to the complexion. Also when worms, which grow in human excrement, are distilled into water by the sun, they give a beautiful color to the face.

Herman Avenarias, while he was studying in Gotha, had horrid, rough, discolored hands. I advised him to rub his hands in a mixture of vinegar and fox excrement, which did them much good. This I learnt of Schroedern.

How the ancients made their beautifying mixture of crocodile dung Jacob Grand has well shown. It makes one think of one's Horace—*Neque illi Jam manet humida creta, colorque, stercore fugatus crocodile.*

Galen also says the dung of the small land crocodile has made pleasant, tender women change to being cold and distant, because they chose it to beautify themselves with.

Lizard's dung makes wrinkled old women smooth and beau-

tiful. It is prepared thus: Take lizard dung, bones of cuttlefish, white citric acid, shavings of deer horns, white coral, and rice meal, equal parts. Mash in a mortar, run through a sieve, then leave one night in snail water, or water made from the stinking goose-foot. Add then white honey in the proper quantity and mix it all thoroughly in the mortar. With this smear the face or breast, and thou wilt see wonderful things, and hardly know thyself again.

This preparation D. Gufers calls a treasure for beauty which, above all other things, powerfully pulls out the wrinkles and leaves the face smooth. Therefore women look for this excrement near all walls and in churchyards, as it has been so highly recommended to them.

The Arabian maidens have a good beautifier made of saffron and chicken dung, which Mr. Tobias Vogel suggests, it being taken by him from the plays of Erasmus Franciscus.

Dung has in general a good oily salt, and is therefore stronger, and of more use than soap, because it extracts, cleans and slightly moistens. Its virtue and strength must be chosen partly from the kind of food used and partly from the variety of animal. Bird dung, because it is naturally very heating, is full of saltpeter, and has as far as skin spots go a peculiarly disseminating, opening, cleansing, dissipating power, depending, of course, upon what the bird feeds upon.

But animal dung has a pain-releasing, cooling and disseminating action. For spots on the countenance take a pound of young dog's piss, sea buckthorn leaves two hands full, fine cut them, leave in the sun mixed together until they spoil, then distil. With this wash thyself. It was taken from the experiments of D. Bartholemæi, Imperial physician, and from Rulande.

Peasants use their own urine to beautify themselves with.

Simon Kramer's daughter used the water from cow dung, in which she washed her face energetically. Besides this, she drank daily a wineglass full of her ten-year old virtuous brother's urine, she giving him wine the night before to increase its strength, and this she drank because of a hot or heated liver.

Here let me stop the translation of this curious book, which has, notwithstanding its apparent nastiness, an undertone of thought wherein lies an expressed belief.

Cosmetics, in a general way, may be divided into two classes, viz., those which are irritating and those which are soothing. For instance, if we wish to remove freckles or warts a stronger

application must be made than if we simply prescribe for a redness following an acne, or an eczema. It is also to be remembered that the application of any remedy should be properly done. It is invariably my custom to teach the patient, either through myself or my assistant, how to apply local remedies. Salves, plasters, lotions and caustics, are so often misapplied that experience has taught me to have an application from which one hopes to get the most good, made by skilled hands to begin with. For instance, nothing suits my patients better for the removal of freckles than this solution :

R.

Corrosive sublimate,	grs. 7.
Distilled water,	f ̄ 6.
Spirits camphor,	̄ ss.
Rose water.	̄ 5.

Three or four thicknesses of linen cut to cover the seat of freckles, are moistened with the solution and placed upon the face at night until they dry, when they are taken off. Whatever remains on the skin is left there till morning and then washed off. After a few nights' application the face becomes red, and the epidermis begins to peel off in fine scales. Then an ointment should be used, and a useful one is :

R

Cetaci et,	
Cere albæ aa	7.00
Ol. amygdal.	14.00
Præcip. alb.,	1.40
Ac. salicyl.,	1.00

This can be used night and morning, the application being made by gently rubbing it over the face, with a *clean* finger for five minutes at a time. I have found that by the use of the lotion as described for four nights, followed by a week's application of the salve, that the freckles disappear satisfactorily without disfigurement or confinement of the patient. In obstinate cases a repetition of this treatment may be necessary. The return of the freckles, however, is what we wish to prevent, and it can generally be accomplished.

Hebra's (princess) water is ordered to be used alternately every night with the salve already given. These latter remedies have been useful in the prevention of freckles, in those who are accustomed to have them in the Summer or at the seashore. The weekly use of the spiritus saponis kalinus I always

advise instead of other soaps for people with poor complexions, and it seems especially good for those subject to freckles. The soap is applied at night on absorbent cotton, which has first been steeped in warm water, the face being gently rubbed with the soap and cotton for five minutes. Afterwards all the soap should be washed from the skin in warm water, and a simple powder of talcum and carbonate of magnesia, equal parts, applied for the night. This simple treatment is frequently all that a rough skin needs. For those who have a red and blotched appearance of the face, due not to stimulants or tight lacing necessarily, I have found the following prescription to be of great use :

℞	Ac. salicyl.,	℥ i.
	Aq. rosa,	℥ vi.
	Sodii biborat., q.s. ut ft.sol.	
	Glycerinæ,	℥ i.
Filter.		

This lotion is applied by moistening linen cloths with it, and allowed to dry on the skin at night, while during the day as often as possible it is gently rubbed over the skin, and allowed to dry there.

Several cases of obstinate punctate red acne have yielded to this lotion, after almost everything else has been tried. Its action is much more effective than a simple solution of salicylate of soda, due, I suppose, to the presence of free boric acid.

In several cases of obstinate urticaria, following the eating of lobsters this Summer, it has given very good results. Such a lotion has a decided use in Winter, for it may be used instead of sulphur, as it never produces comedones. It is my experience that often when sulphur is used on the faces of people living in houses heated by the ordinary coal furnace, the hot air coming straight off the coals up the flues, with its necessary portion of coal dust and gas, that such people, who frequently warm themselves at the flues, have comedones. Stopping the use of sulphur I have found the only remedy in such cases.

In the removal of superfluous hairs, I have given up electrolysis. The results which I have had myself and those which I have seen of others have not been sufficiently good to warrant its continuance. The trouble is great, the time spent long, and withal not worth the fee we get. Besides this, I find that the proper application of a good depilatory answers the purpose much better. There are many women who wish to get rid of

the white lanugo down on their faces, upon whom it seems to me that electricity cannot be used for the fear of stimulating the growth of the surrounding hair, and the appearance of permanent scars.

If a preparation of a yellow sulphate of arsenic and quicklime, of equal parts, made into a paste with hot water, be allowed to dry on the hairy skin it removes the hair for ten to twenty days, and sometimes permanently.

By electrolysis I had gradually been removing the hair from a lady's chin successfully, but with much fatigue to herself and myself, when she had to leave town. I tried the above paste once, and she repeated it once after a time. Since then there has been no return of any hair. I have seen her many times in the last few years and can judge for myself. In other cases very satisfactory results have been thus obtained. On the other hand, nothing seems to take the place of electrolysis where there are a few strong hairs growing from moles, in the removal of moles themselves, in angioma, or in permanent small red spots on the nose.

The removal of warts is sometimes laborious, so much so that most of us have our special and favorite treatment. I am strongly inclined to the idea that they are contagious, an idea gathered from clinical experience rather than from any bacteriological experiments. Following this idea I use the prescription here given, its strength being altered to suit different cases:

R

Hydrarg. bichlor.,	grs. v.
Ac. salicyl.,	℥ i.
Collodion,	℥ 1.

I sometimes increase the bichloride of mercury to thirty grains in the same amount of collodion, if the milder application does not answer. It is applied every day once, the upper crust of the previous application being removed before a fresh one is made. Four such applications generally soften the wart to such a degree that gentle traction removes it painlessly, the further dressing being any simple ointment, such as a 5% salicylic-lanolin.

In Summer stout people are sometimes worried by the appearance of a great number of small flat round warts on the back of their hands. Several applications of absolute alcohol during the day and the subsequent use of a powder composed of talcum and magnesia, equal parts, thoroughly mixed with a

small quantity of salicylic acid, say five grains to the ounce, has given me excellent results.

The use of the galvanic current as a cosmetic is interesting me now, however, more than the others, and for the reason that I have had some astonishing results from it. I cannot better illustrate its use than by briefly relating a case or two.

A young lady, seventeen years old, with a chronic indurated most unsightly acne, had been under other and my treatment for a long time. I had treated her for a year. All kinds of remedies, both internal and external, were tried, and I was not satisfied that the patient was getting permanently better. She was most willing and faithful in carrying out all that she was told to do, and it made the poor result of treatment only the more worrying because she would have been very pretty if her skin had been smooth.

I tried the galvanic current at last, using both poles upon the face, and turning on from ten to fifteen cells of an ordinary fluid battery for fifteen minutes at a sitting. The poles were moved about from time to time when the current became too painful in any one spot. The change in the skin was great during the first application. There was intense redness with decided elevation of the indurated portions, and an oozing of serum and blood from those which had been opened two days before. She was sent home under a thick gray veil and told to use the solution of soda and salicylic acid, which I have already described. The applications of electricity were made three times weekly, six weeks being necessary to effect a cure. Since this case I have used it successfully in many others.

There is a form of punctate indolent acne, in delicate young girls who have a dull, yellowish, unhealthy looking skin, in which this treatment seems the best I have yet found. If the reaction of the electricity is not great the moistening of the poles in the solution of soda and salicylic acid increases it very considerably. Unless there be a decided reaction during the first application little good seems to be done.

As a substitute for rouge the galvanic current can be used. By carefully regulating the strength of this current in accordance with its reaction on a given patient, and by properly handling the poles so that only the cheeks shall be reddened, a woman's face may be colored for several hours with a natural blush which nothing can rub off. This is not theory, for I have been led to know the fact from a patient who confided to me that it was the lasting color the electricity gave her face which

made her come to me before dressing to go to an entertainment. She had been cured of an acne, but thought her face too white, and being afraid of rouge, she thought electricity would take its place.

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THE ETIOLOGY AND PATHOLOGY OF IMPOTENCE.

BY

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IN the following pages will be discussed the nature and causes of that variety of sexual disability known as nervous or atonic impotence. The subject is somewhat obscure and complex, and the conditions vary much in different cases; so that it is difficult to estimate the force of the various nervous, psychical and physical elements in a given individual. Consideration will be first given in detail to the various influences which are commonly recognized as tending to bring about primarily a hyperæmia and hyperæsthesia of the prostatic portion of the urethra, and secondarily the morbid nervous condition, with exaggerated reflexes, which constitutes the affection under discussion.

Masturbation is of importance in this connection, yet its influence in the causation of impotence is often exaggerated. Masturbation is exceedingly common; that is to say, the number of those who have to a greater or less extent indulged in it is large. Beard says: "The habit is almost universal." Sufferers from sexual weakness, therefore, nearly always conscious of having at some time committed the sin, are apt to attribute their trouble to that cause; whereas, unless the practice has become habitual, it probably has no great effect. Keyes says: "It may be safely assumed that a large proportion of mankind have at some period of life masturbated more or less, and it is equally safe to assert that at least ninety per cent. of such masturbators are not physically injured by the habit."

The greater mischief of self-abuse over excesses with women is threefold. In the first place, excess is much more easily fallen into, opportunity being nearly always present. Secondly, it is so demoralizing, so debasing, so unmanly, especially when persisted in into adult age, that, even if not carried to excess, the consciousness of shame and guilt is an important factor in

producing the psychological phenomena of impotence. This view does not seem to be held by Paget, who says: "Masturbation does neither more nor less harm than sexual intercourse practiced with the same frequency, in the same conditions of general health, and age, and circumstances." Regarding the greater injury of self-abuse, Casper says: "The debauchees of Venus, cheerful and exuberant, are proud of their excesses . . . while masturbators, as soon as they learn that masturbation is a vice, become depressed in spirit. . . . Often a fearful strife arises between the sexual desire which in them finds satisfaction in masturbation, and the exertion to remain pure. . . . We can not be surprised that such a struggle shatters the nervous system." Thirdly, in persons of a highly nervous organization and imaginative temperament, who are not content with the mere physical pleasure derived from manipulation, but, during the act, picture to themselves extraordinary scenes of debauchery, masturbation may lead to a true perversion of the sexual sense. On this point Hammond says: "The masturbator relies on the fertility and extravagance of the lewd images presented to his mind for the increase of the pleasure derived from his act. . . . As he goes on he finds . . . that gradually the visions which once sufficed to produce the requisite venereal excitement have lost their power. . . . Still more libidinous and unnatural representations are conceived by his mind, . . . till at last, should he attempt sexual intercourse, he finds that the reality is so much less than his imagination had led him to believe that it is incapable of sufficiently arousing his appetite. He is, in fact, impotent to women." The following is from Acton: "A youth who masturbates himself and continues the practice as he grows up to manhood, generally evinces no disposition towards the other sex. Only his own solitary pleasure can give him any gratification; as far as women are concerned, he is virtually impotent. Lallemand gives the following account of such a person's state of feeling towards the opposite sex: 'At first, of course, it is on the sex that their thoughts dwell, and they embellish an ideal being with all the charms of imaginary perfection; the habit, however, which enslaves them little by little, changes and depraves the nature of their ideas, and at last leaves nothing but indifference for the very reality of which the image has been so constantly evoked.'"

As to the period of life at which self-abuse is most harmful, nearly all writers seem to agree that in childhood, when the organs are not yet developed, the mischief is much more ser-

ious. Casper says that "masturbation before maturity must have farther reaching results than greater excess carried out during maturity." Beard says: "The earlier the habit is formed, other conditions being the same, the more injurious it is." On the other hand, Howe says: "Onanism developed after puberty, in persons of sedentary habits, is more pernicious in its effect than when it is commenced in early childhood." It is probable that in the youth the injury would be greater to the body, and in the adult, to the mind.

The local physical results of excess consist in a chronic congestion and catarrhal condition of the mucous membrane of the prostatic urethra and the caput gallinaginis brought about by more or less continual sexual excitement with frequent and protracted erections—in other words, frequent recurrences of active congestion. There is usually in this condition extreme hyperæsthesia of the prostatic urethra, and in many cases the catarrhal condition is shown by the presence in the urine of shreds containing pus corpuscles, epithelium, and sometimes spermatozoa.

The evil results of masturbation, especially the local condition just mentioned, may be produced in another way by those having sufficient self-control and moral purpose to avoid actual self-abuse. This is the habit of allowing the mind to dwell on erotic subjects, conjuring up before the imagination all sorts of extravagant and voluptuous visions. The sexual organs are thereby kept in a state of erethism for prolonged periods, not even experiencing the temporary relief afforded by the orgasm, as in ordinary masturbation. The victim of this vice believes that so long as he prevents ejaculation no harm is done, but it is evident that such protracted and excessive hyperæmia must necessarily produce the same results.

Sexual excess is, of course, a relative term and varies within very wide limits in different individuals. Sexual indulgence becomes excess when it is followed by definite symptoms: malaise, nervousness, mental depression, lassitude, and by increasing difficulty, only occasional, perhaps, in accomplishing the act of coitus. The results of excess, as might be expected, are of much the same nature as those of masturbation. There is the same local congestion of the prostatic urethra with chronic catarrhal inflammation and hyperæsthesia of the mucous membrane. The moral condition of the patient, however, is better. He has less to be ashamed of, his mind is not full of extravagant images, and there is consequently less of the psychological ele-

ment in his weakness. It is in most cases simply exhaustion from overuse, and rest alone will usually do much toward bringing about recovery. Still, in extreme cases and in persons of a nervous temperament, there will gradually become developed various nervous symptoms more or less serious.

Bearing somewhat the same relation to sexual excess that indulgence in erotic thoughts does to masturbation, is ungratified sexual desire excited by intimate association with women, stopping short of the act of intercourse. During such interviews the genital organs are kept in a state of constant and intense excitement, without the natural relief afforded by coitus. When long-continued and frequently repeated the local effects on the prostatic urethra are not long in showing themselves, and the results are sure to be injurious. The testicles on such occasions are often painful and sensitive and nocturnal emissions become frequent. The more remote effects also may be more harmful than those of simple excess. According to Acton, "Among the principal evils is the weakening of that consensual action which should connect the excitement of the organs and the complete performance of the sexual act."

Continence as a cause of sexual weakness, is a subject on which there is great diversity of opinion among the different authorities. Acton says: "I have heard of and met with persons who feared that if the organs were not regularly exercised they would become atrophied or that in some way impotence might be the result of chastity. . . . There is not a *greater error* than this. There is no physiological truth in this want of exercise of the sexual organs. . . . The function goes on in the organ always from puberty to old age." Against this argument we have the testimony of Milton: "There is no fact in pathology better established than that a structure, a muscle for instance, if never exercised will waste and become impotent. And although the function is here more intermittent than in ordinary muscular motion, yet it is quite contrary to reason and analogy to suppose that a forced, unnatural disuse can fail to affect its capacity. . . . Of those who remain continent up to twenty-six, a certain proportion become wholly or partially impotent." Howe says: "Sexual debility is far more frequent among men who marry after the age of thirty-five than it is among those who marry young, and failure occurs earlier." According to Lallemand, "prolonged inaction of the genital organs diminishes the tonic resistance of the ejaculatory ducts, disorders their sensibility, and perverts their functions, without

being able to prevent the formation of semen by the testicles, or its passage into the seminal vesicles," in other words, absolute continence long maintained leads eventually to spermatorrhœa and impotence. Hammond also believes that impotence "becomes permanent through a long continuance of sexual abstinence."

My own belief is that healthy, normal men can practice continence many years without any loss of sexual power, and that it is comparatively easy for most men whose time and thoughts are occupied with their daily pursuits. On the other hand, I also believe that a certain proportion, perhaps a large proportion, of sexual neurasthenics are injured morally and physically by prolonged continence, and run a risk of losing thereby what little sexual power they have; and that the impotent who have had their power restored to them by treatment, must use it, although, of course, with great moderation, if they wish to keep it.

Sexual perversion is nearly always a cause of, or associated with, impotence. The sexual appetite may be perverted in many different directions. It is aroused in one by unnatural methods of intercourse, with or without inversion of sex; in another by the sight or touch of certain objects, as articles of women's dress; in another by sheer force of the imagination, as in some cases of masturbation before referred to, and in cases described by Hammond as mental sexual intercourse, in which the orgasm is brought about by imagining the act of coition with a certain woman while looking intently at her. Many strange actions, deeds of cruelty to self or others, murder and mutilation are committed which are only to be accounted for on the theory of sexual gratification derived from them. The impotence in these cases is of the psychical form, and manifests itself by indifference or actual repugnance for women and for normal intercourse, so much greater pleasure is there for the perverted imagination in the peculiar form of indulgence which each one craves. That there need be no real loss of erectile power is shown by the great excesses of which they are often capable. One of Hammond's cases performed the act of pederasty eleven times in one night. Many sexual perverts are actually insane. In some the abnormal appetite is inherited or is developed at puberty, or even before, while in others it is acquired in the search for novel and stronger stimuli for organs which have already begun to flag as a result of previous excesses, in this case the perversion being a result rather than a cause

of impotence. The subject is a revolting one and, having its chief interest for the neurologist, alienist and medical jurist, need not here be considered in detail. Remarkable cases are reported by Hammond, Krafft-Ebing and others.

Spermatorrhœa and impotence are often associated together and it is not always easy to accurately define the relation they bear to one another. Either affection may, under different circumstances, be regarded as a symptom of the other, or both, perhaps, as symptoms of an underlying condition. Spermatorrhœa in some cases, however, undoubtedly bears a distinctly causative relation to impotence, and where it exists as a complication it must often increase and aggravate the latter through the lax and empty condition of the seminal vesicles and ejaculatory ducts.

The term spermatorrhœa being used in a different sense by different writers, it is necessary to adopt a definition. In its broadest sense it has been taken to include all involuntary discharges of semen. In its most restricted sense it has been defined as a constant oozing of semen from the urethra. This definition is too narrow and represents a condition which is rare. The first definition, so amended as to include only those seminal losses that are pathological as well as involuntary, seems the best. This would exclude only physiological nocturnal emissions, that is, such as are due to accumulation of semen in the testicles and seminal vesicles as a result of continence.

Nocturnal pollutions may be assumed to be physiological which do not occur oftener than once a week and are followed by no bad effects. They are pathological, however, even when infrequent, if the patient feels the effects in languor, depression of spirits, backache, headache, dizziness and other symptoms. This view of nocturnal emissions coincides very nearly with that of most authorities. Milton, however, attaches the greatest importance to these emissions, regarding them as of vastly more account than all other seminal losses combined. He expresses the opinion that they "are invariably more or less injurious" and that "in men who have reached the age of twenty-four anything beyond one emission a month requires attention." Keyes, on the other hand, says: "When emissions do not exceed three times weekly they should be disregarded."

Diurnal pollutions are far more serious and in the severer cases show a profound disturbance of the sexual function. In a man so affected the emissions may take place on very slight

provocation, with very feeble erection or none at all, and with scarcely any sensation. Slight friction of the clothing, riding horseback or in the cars, shampooing the head or even brushing the hair, impure thoughts, looking at women or indecent pictures; these and other similar causes have been described in various cases as sufficient to bring about a precipitate emission. It is evident that in such a condition of things anything approaching a normal erection is impossible and the impotence must be complete. There may be mild cases, however, in which such emissions may occur rarely and as a result, perhaps, of a temporarily increased excitability, and in which, of course, the symptom has less significance.

Gross divides spermatorrhœa into three classes: nocturnal pollutions, diurnal pollutions, and spermorrhagia, which is another name for spermatorrhœa in the restricted sense. Uitzmann makes the division into pollutions and spermatorrhœa, the former being "a motor neurosis of the sexual apparatus with spasm of the muscular coat of the seminal vesicles," the latter "a similar neurosis with paresis of the ejaculatory ducts" causing "a slight, dribbling, sometimes continual, flow of semen without erection of the penis and without especially pleasurable sensation, . . . more copious after defecation and micturition." As to the frequency of spermatorrhœa opinions have differed much since the days of Lallemand, when every prostatic discharge was considered to be of seminal character. Later there was a reaction, during which true spermatorrhœa was believed to be extremely rare and by many even not to exist at all. The affection, however, undoubtedly deserves recognition and it has already received it at most hands. Hammond, it is true, thinks the discharge of semen at stool and in the urine "exceedingly rare" and quotes Paget in support of this view. Milton has "often examined several specimens of urine without finding any" spermatozoa, and Bartholow says: "If a proper examination of this fluid (discharge after urination and defecation) be made, it will be found not to contain spermatozoa." Yet, according to Fürbringer, it is not less frequent than prostatorrhœa, and Beard considers it "a very frequent symptom." This opinion more nearly accords with my own experience, for I have frequently found spermatozoa in the urine and in the fluid exuding from the meatus at stool in cases where the possibility of error due to a previous coitus or emission could be excluded. In the urine I have usually found the spermatozoa not at the bottom of the glass, but in semi-transparent shreds

which commonly float suspended midway or may be brought to view by stirring.

It seems to me, however, that the importance of these seminal losses as a cause of impotence has been often overrated, as I have found them in a number of cases where there was no question of sexual power, and, on the other hand, it is certainly true that in many cases of impotence there is no spermatorrhœa. Keyes says: "Patients with true spermatorrhœa are not by any means necessarily impotent, but their sexual appetite is usually morbidly excessive, or feeble; perhaps unnatural and perverted, while sexual power is generally diminished." Fürbringer considers the prognosis as to sexual competence bad in diurnal pollutions, but attaches much less importance to losses at stool and with the urine, and reports a case where such losses had occurred daily for eleven years without loss of sexual power, but with diminished pleasure.

In cases with a previous history of posterior gonorrhœa, spermatorrhœa is not uncommon, due to the effect of the inflammation on the mucous membrane of the prostatic urethra and on the mouths of the ejaculatory ducts, and these are the least serious cases, partly, no doubt, because they are less apt to be associated with the general debility and the nervous and psychical symptoms of masturbators and other sexual neurasthenics; they are also more amenable to treatment.

Spermatorrhœa is usually the result of natural or unnatural excesses, and in whatever way it manifests itself, the underlying condition is essentially the same, viz., a congestion, sometimes catarrhal inflammation, of the prostatic urethra and caput gallinaginis involving the mouths of the ejaculatory ducts and impairing their tonicity; also an irritability of the nerve terminations supplying this region as well as the muscular coat of the vesiculæ seminales and the testicles. Secondarily to this exaggerated irritability of the terminal nerve filaments there is brought about an increased reflex excitability of the cord, which may, according to Bartholow, result in an organic lesion. The innervation of the prostate is very rich and complicated, which accounts for the varied nervous phenomena resulting from a lesion or irritation in this region. Inasmuch as we have the same local conditions and nervous irritability in impotence, it is easy to see that the two affections are closely allied and must often coexist.

From the foregoing observations on spermatorrhœa the following conclusions may be drawn:

1. Nocturnal pollutions are physiological, unless followed by definite symptoms.

2. Diurnal pollutions constitute a grave symptom and, when frequent, show serious derangement of the sexual function, if not absolute impotence.

3. The spermatorrhœa of defecation and micturition, although not always indicating impairment of sexual vigor, is a condition that calls for careful attention, and in some cases, especially where the oozing of semen is constant, partial or complete impotence is reasonably sure to follow in time.

Prostatorrhœa is one of the results of congestion and chronic catarrhal inflammation of the prostatic urethra, generally following masturbation or sexual excess, and is present in a considerable proportion of cases. It should perhaps be regarded as a symptom or accompaniment of impotence, rather than as a cause; yet the mere fact of the discharge, its contemplation by the patient, the unpleasant sensation of trickling along the urethra and of moisture of the glans and prepuce, together with the fear that it is semen, produce an amount of worry and depression of spirits that are often decidedly injurious in sensitive persons.

Gonorrhœa, when it extends into the posterior urethra, may, as already mentioned, by becoming localized in that region, cause a chronic prostatitis and be the starting point of a train of symptoms from which impotence may eventually be evolved. Yet, in a large majority of cases of posterior gonorrhœa, gonorrhœal cystitis or epididymitis, in fact of all cases in which the inflammation has passed the cut-off muscle, there is no resulting impotence; and even in spermato-cystitis there may be neither impotence nor sterility. *Gonorrhœa*, therefore, may be described as an occasional, perhaps accidental cause of impotence.

Stricture of the urethra, according to Gross, plays a very important part in the etiology of impotence, but it is doubtful if there are many surgeons who would be inclined to indorse his views to the fullest extent. Gross maintains that strictures, not due to gonorrhœa, but occurring as a result of masturbation, are extremely common, and it would seem from the reports of his cases that they are by far most frequently to be found at a distance of from five to six and a half inches from the meatus. That non-venereal strictures occur is beyond doubt, and I have found them in men with a history of masturbation and in those without, usually, however, at or near the

peno-scrotal angle, which in my experience is the commonest seat of stricture due to any cause. In my cases they have always been associated with a very narrow meatus, and it has seemed to me that they might be due quite as likely to the irritation caused by this obstruction as to masturbation. However this may be, it is hard to believe that they are of extraordinary frequency, or are of special importance in this connection beyond other sources of irritation. I am certain that in a majority of the cases of impotence that I have examined no stricture has been present. If it is the mere presence of contraction, with the irritation dependent upon it, that constitutes the important factor in the loss of virility, there is no reason why a gonorrhœal stricture should not have as much effect as any other, yet no surgeon will contend that any considerable proportion of the patients whom he treats for stricture complain also of impotence. If, on the other hand, the stricture following masturbation is supposed to have a peculiar influence, many will be forced to the conclusion that masturbation is to be considered the true cause of the impotence, the stricture being a complication.

Varicocele has been regarded as a cause of spermatorrhœa and impotence. The evidence on this point seems vague and inconclusive. According to Keyes, varicocele is generally caused by ungratified sexual desire or excess, and this fact, together with the mental anxiety which is often a feature of the case, is probably responsible for whatever agency the affection has in the production of impotence. That it has any direct specific effect is doubtful. Keyes says: "The only general symptoms in varicocele besides pain are those of hypochondria and defective *morale*, so common in all affections of the genital organs."

Mental emotions or conditions may be a cause of impotence, generally of a temporary character. Such cases are almost always of the psychical variety. Sometimes the disability is manifested toward certain persons only or under certain circumstances. This is called by Ultzmann *relative* impotence. Cases have been reported of patients who were impotent except in a certain room or unless the woman was dressed in a certain way. Cases of impotence toward all but one or a limited number of women, are quite common. Among mental causes of impotence are preoccupation of mind, absorption in business affairs and hard study; disgust, fear and anger; dread of failure which plays a most important part in every case of nervous impotence; superstition, as in cases reported

by Hammond, where the patients believed themselves under a spell. Of course these mental emotions and conditions have their greatest influence in those persons already suffering from the results of masturbation, excess, etc.

Original absence of all sexual desire is mentioned by Hammond as a rare cause of impotence, and he reports two cases of this kind. I have had under observation at intervals for about three years a case which seems to belong to this class. The patient is a brass-worker twenty-seven years old, in excellent general health. He never had any sexual feeling until the age of nineteen, when on climbing a post he experienced a pleasurable sensation which suggested masturbation. This was repeated once a day for about a week and he has never done it since. He has never had any sexual feeling or desire since. He has never attempted coitus nor had any inclination to. He thinks he never had a nocturnal emission before he was nineteen and very few indeed since then. He never has erections, except very rarely a transient and incomplete one on waking in the morning with a full bladder, and this without the least erotic sensation. The penis and testicles are apparently perfectly normal. There is no discharge at stool and no spermatozoa nor shreds of any kind in the urine. He seems utterly indifferent to his condition and entirely content to remain impotent, seeking treatment only for certain symptoms of sexual neurasthenia—dull feeling in the head, itching and burning of the scrotum, etc., which are relieved by the passage of sounds.

Pathology.—A study of the pathology of nervous impotence involves a consideration of the local physical condition and of the general nervous condition. It involves a consideration of the extent to which the latter condition is dependent upon the former and of the extent to which it is to be regarded as an original weakness of the nervous system, acting perhaps as a predisposing cause, or, at any rate, favoring the development of the various nervous and mental phenomena, which may be grouped together under the name of sexual neurasthenia; although this term does not always imply a state of impotence.

The primary local condition consists in the hyperæmia and chronic catarrhal inflammation of the mucous membrane of the prostatic urethra and caput gallinaginis, with atony of the mouths of the ejaculatory ducts, already more than once mentioned, and resulting from frequent and repeated engorgements of the blood-vessels. Irritability of the nerve filaments terminating in the mucous membrane, in other words hyperæsthesia.

is a natural consequence. Yet hyperæsthesia is not always present in these cases. There may be only moderate sensitiveness such as might seem to be normal, or there may be actual diminution of sensitiveness amounting even to anæsthesia, but this generally in more advanced cases—sometimes called paralytic impotence. I have seen cases, however, evidently not so profoundly affected, where there was very near to being an anæsthetic state of the prostatic urethra, in whom perhaps, as Gross believes, “diminished reflex excitability of the lumbar genital centre appears to be induced before prostatic inflammation has had time to declare itself.” On the other hand, it may well be asked—If normal men were examined, would there not be found in many a very sensitive condition of the prostatic urethra on passage of the sound? I have found it so in cases where there were no symptoms of sexual disability, nor even, apparently, of prostatic irritation. It would seem then that this prostatic hyperæsthesia is rather an uncertain guide. Yet, in spite of exceptions, it is a symptom of value. It has diagnostic significance and is very often a reliable measure of the amount of deviation from health. It may be that it is one thing for a healthy man to have a hyperæsthetic urethra and quite another thing for a sexual neurasthenic to have the same.

In order to trace the connection between this local physical condition and the general nervous condition, it is necessary to study the nerve supply to this region. According to Ultzmann, “the hypogastric plexus of the sympathetic, which is reinforced by filaments from the sacral ganglia and from the pudendal plexus of the sacral (spinal) nerves, innervates . . . the seminal vesicles and prostate, together with the bladder, by means of the plexus vesicalis. . . . According to Klein, we find especially numerous nerve-trunks in the prostate between the sphincter urethræ and the circular striped muscular fibres of the cortical layer, which extend along the urethra, and hold scattered between their fibres numerous ganglion cells. The prostate also contains in its cortical layer ganglia and Pacinian corpuscles.” Thus it will be seen that the spinal and sympathetic nerves are here in the closest connection with each other, and that an irritation applied to a surface so richly supplied with terminal filaments from these plexi will produce most varied and far-reaching results.

These results show themselves in a general disturbance of the nervous system and in the local neuroses of the genito-urinary

tract. Of the numerous general nervous symptoms, cerebral, spinal and sympathetic, a few may be mentioned: mental depression, insomnia, morbid fear, lack of mental control, defective memory, lumbar pain, twitching and jerking of muscles, cold and sweating extremities, palpitation, nervous dyspepsia.

The local neuroses are of more interest in a study of the pathology of impotence, and in this connection a comprehension of the mechanism of the erection is essential. The following description is from Ultzmann: "Under the influence of the *nervi erigentes* the organic muscular fibres of the cavernous tissue become relaxed, and the interspaces thereby enlarged and made ready for the reception of a large amount of blood. There is still a second factor of great importance, and that is the prevention of the back-flow of the blood out of the corpora cavernosa, which is probably accomplished by the following muscular apparatus. Along the subpubic portion of the urethra lies the bulbo-cavernosus muscle, which begins behind in the central tendon of the perineum. The ends of this muscle merge in a thin aponeurosis, which is continuous on the dorsum of the penis with the tendons of the ischio-cavernosi muscles. When this muscular apparatus contracts, the penis in the region of the symphysis is constricted, and the return of blood prevented; at the same time, probably through the influence of the ischio-cavernosi the penis is made erect. . . . Nervous or psychical impotence may be dependent on the increased action of the inhibitory cerebral nerves brought about by unpleasant, strongly agitating, excitement of the brain. Through the action of these inhibitory nerves the organic muscular fibres of the corpora cavernosa will contract and oppose an obstacle to the entrance of the blood into the cavernous tissue. . . . The skin of the penis is frequently found very insensible to electrical stimulation. It is also common to find that the above-mentioned muscular arrangement, which acts by preventing the return flow of blood from the corpora-cavernosa, reacts only feebly to electrical stimulation."

Thus it is apparent that an irritation starting in the prostatic urethra is transmitted to the neighboring plexi and ganglia, thence along the sympathetic and central nervous system and reflexly from the brain and cord to the vaso-motor, musculo-motor and sensory nerves of the genito-urinary tract. Weakness and degeneration of the muscles concerned in erection through impaired innervation and imperfect nutrition; feeble and transient erection due to this muscular weakness and to deranged function of the vaso-motor nerves supplying the ves-

sels of the corpora cavernosa, as well as to the spasm of the organic muscular fibres of the cavernous tissue through the influence of the inhibitory action of the cerebral nerves ; premature ejaculation due to the too quick transmission of impulses over hypersensitive nerves, to irritability of the genito-spinal centre, and to the influence of mental emotions ; various subjective sensations about the genitals, pain, tickling or itching of the penis, urethra or scrotum, etc. ; diminished sensibility to electrical stimulation ; all these phenomena are therefore accounted for.

This disturbance of the nervous system, general and local, is probably purely functional in most cases, but Bartholow, as before mentioned, believes that organic lesion of the cord will follow in time, and Casper says of the extreme cases, which he characterizes as paralytic: "These are cases of an organic change in the centres presiding over erection, or in the conducting paths. Which, it has not yet been proven, still it may be assumed that in advanced cases the designated nervous parts are completely degenerated. In others there is only a partial degeneration or only a transient exhaustion of the nerve cells, a so-called atony." According to Beard "the heart and blood-vessels are quick to feel reflex irritation. Thus the local and general blood supply of the body is liable to fluctuation, with a special tendency to local passive hyperæmia or nervous congestion."

It remains now only to consider how much this condition is dependent upon an original weakness or defect of the nervous system. In many cases doubtless the neurasthenic state is wholly acquired in later years, but I am inclined to the opinion that very often, perhaps as a rule, there is a congenital, probably inherited temperament, a predisposition or propensity, mental and nervous, to unnatural impulses. The nerves are more prone to functional disturbance and degenerative changes, and there is deficient will power and self-control and a congenital lack of moral sense in sexual matters, which, however, is entirely consistent with the highest character in other respects. The healthy, normally constituted boy acquires bad habits through ignorance and evil association, easily rids himself of them when he learns better and suffers little injury ; while the congenital neurasthenic begins early and spontaneously to brood over sexual matters, his organism offers feeble resistance to abnormal impulses and their pathological effects, and he easily drifts into a condition of confirmed sexual neurasthenia, if not of impotence.

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GLUCOSURIA AS AN ADDITIONAL SYMPTOM INDICATING THE
NEUROTIC ORIGIN OF DERMATITIS HERPETIFORMIS
(DUHRING).

BY

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MANY cases of dermatitis herpetiformis have been reported by Elliot, Brocq and others, pointing to some severe nervous shock as the essential etiological factor in the production of this interesting cutaneous disease. But in the writings of each no mention is made of any change in the urinary secretions. In the following cases glycosuria was present to a greater or less extent, and in all of the cases personally observed, irrespective of those herein reported, the original

and recurrent attacks followed some unusual mental exertion or severe nervous shock, showing an intimate relationship between the advent of the eruption and the reception of the shock.

Case I.—Mr. S., age 29 years; strong and well-developed man; no history of any specific taint; habits temperate; skin dark but perfectly healthy as to texture, etc. During a severe and prolonged mental strain (endeavoring to abort a strike at a foundry in which he was a foreman), he noticed a few painful itchy vesicles over the neck and right ear. These rapidly multiplied until the shoulders, arms, chest walls, buttocks and thighs were invaded. At the time of consultation the following was observed: the parts enumerated were covered with a profuse eruption of a multiform character, chronic, sub-acute and acute. There were papules, vesicles and pustules scattered throughout the entire portion affected. Frequently the three would be closely grouped together in a circumscribed patch. In parts the arrangement and distribution closely resembled zoster. The vesicles were of various sizes, many of them being minutely small, while others were as large as pemphigoid bullæ. The pustules dried into dark brown scabs. At first the patient complained of severe burning in the diseased skin, but after the eruption had existed for two days this was accompanied with itching, which grew more intense as the process continued. The treatment was wholly palliative: bromide and chloral to quiet the nervous irritation and to produce sleep, external lotions and ointments containing anti-pruritics to allay the itching. All through the illness there had been polyuria. On account of this symptom and at the suggestion of Dr. Sherwell¹ who had seen the case in consultation, the urine was examined with the following results—color light, specific gravity 1030, nothing special by microscope, test for albumen negative. On testing for sugar it was found at all times, in varying quantities from a trace to as high as five per cent. With this clue, the treatment was directed to the relief of the diabetic condition. Diet was regulated, mental worry removed, and the administration of codia and bromide, and lastly tonics containing arsenic. The external treatment was soothing; the patient rapidly improved and was dismissed cured in about one month from the advent of the disease. Fourteen months after he again presented himself with the same cutaneous manifestations in a less degree, which

¹ Dr. Sherwell referred to this case at the twelfth annual meeting of the American Dermatological Association, 1888.

had again followed mental worry. The urine being examined was found to contain about one per cent. of sugar. Beneficial results were obtained by about the same line of treatment as in the preceding attack. Since then the patient has avoided mental shock and worry and there has been no recurrence of the cutaneous disease, now nearly six years.

Case II.—Boy, age 13. After a severe fright voided large quantities of urine, which were found to contain traces of sugar. A short time after the reception of the nervous shock erythematous patches appeared on the neck, buttocks and inner side of the arms and thighs. The patches became thickly studded with papules which rapidly developed into vesicles and pustules which finally dried into dark brown scabs. The treatment was to quiet the disturbed nerves, soothing applications to the skin lesions, to subdue the intense itching, which was the most annoying symptom, antipyretics for the fever, and finally tonics. After two or three relapses the patient became fully convalescent.

Case III.—Mrs. M. A slight, but well-built woman, mother of three children, temperament nervous and hysterical, general health always good. Before the cutaneous process began she had been subjected to excessive mental anxiety and shock, superinduced by the illness and death of her youngest child. The eruption was principally over the neck, chest and thighs, presenting the typical picture of dermatitis herpetiformis, as described by Dr. Duhring. There was no polyuria except just after the death of her child, which was probably wholly hysterical. However, the urine was found to contain sugar in small quantities. The treatment was quite similar to that of the first case, but in spite of physical improvement the mental state remained bad. The cutaneous condition would improve for a few days, followed by a relapse, successive crops of papules and vesicles appearing at short intervals. The patient was advised to seek change of scene and climate, when slow but permanent convalescence was established.

Case IV.—Mr. S., age 40 years. Of a highly nervous and excitable temperament; worries about the slightest things. Had been given to excesses in early life. The eruption, which had existed for over a year, consisted of vesicles and papules on the neck and shoulders. There was also a papulo-vesicular erythematous plaque over right buttock and thigh. Frequently during the course of the disease the small vesicles would coalesce and large bullæ would be the result. There

was itching at all times, being more intense during the acme of the eruption than in the beginning or the ending of the outbreak. The initial attack followed anxiety over business difficulties. The urinary secretion was greatly increased in both the first and subsequent attacks; tests for sugar always revealed it in varying amounts. When the mental disquiet subsided the urine became normal and the eruption grew less, fresh exacerbations following the slightest anxiety or worry. The patient being easily discouraged and not receiving rapid results from treatment became dissatisfied and consulted another physician, with what results is unknown.

These cases are interesting inasmuch as they all present a symptom (glycosuria) which has not been referred to in any article on this much-discussed disease.

It is not the object of this paper to consider in extenso the other clinical facts, but it is proper to refer briefly to the bearing of this symptom on the theory of the disease. Since the time of Claude Bernard, the existence of a sugar center in the oblongata has been generally recognized. It is further known that not only after direct puncture of this center, but also in some cases of general brain shock and in even more localized sudden lesions in distant parts of the brain, sugar in the urine has been observed. Beyond the cases of direct injury to the oblongata, there is so little uniformity in the other cases of cerebral injury that it is impossible to draw any inferences from them bearing more closely on the disease under discussion, although the presumption is admissible that in all of them there is indication of the sugar centre. Whether this represents a distinct mechanical irritation, as by pressure, or whether it be produced indirectly by influences from the higher centers radiated to the oblongata, is more properly a neurological point. It is sufficient that the facts are established and that they offer a reasonable explanation of the glycosuria following nervous shock in the four cases reported. The occurrence of sugar in the urine coupled with the neurotic symptoms described by other observers, corroborates the view that the cutaneous manifestations of dermatitis herpetiformis are of nervous origin.

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THE OIL OF EUCALYPTUS AS A URINARY ANTISEPTIC.

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IT is probable that a perfectly satisfactory means of aseptizing the urinary tract will never be attained. The reasons for this, involving the question of resistancy on the part of the kidneys and mucous membrane of the urinary tract to antiseptic drugs, are too obvious to require expatiation. A point of great importance is the tolerance of the stomach, as many of the drugs which are recommended as urinary antiseptics must be given in large doses to be at all efficacious.

The administration of boric acid, as originally suggested by my friend, Dr. E. R. Palmer, of Louisville, Ky., has proven quite valuable in the experience of many surgeons, and has the merit of being perfectly safe.

Boric acid is well tolerated by the stomach and entirely above criticism as regards its local effect upon the urinary mucosa and the secreting structure of the kidneys. It is, however, a drug of comparatively feeble antiseptic properties and in my experience not to be relied upon in emergencies. For a considerable period I have been using, both as a prophylactic and curative antiseptic, the pure oil of eucalyptus. I have found this drug to be an ideal urinary antiseptic, one, too, that has proven very valuable to me in meeting post-operative emergencies. My attention was first called to the use of eucalyptus as a urinary antiseptic by one of my patients, a man of forty-five years of age, whom I was treating for an old traumatic, irritable stricture of the deep urethra. The patient absolutely refused to be operated, and rather against my own convictions as to the advantages of a perineal section in such cases, I proceeded to treat the case by dilatation. The case did not do well and each attempt at dilatation was followed by a succession of chills with febrile movement and sweating. The usual methods of prophylaxis, and the administration of boric acid were ineffective and I finally refused to proceed further without operative interference. At this juncture the patient said, "Doctor, I can stop the chills and fever if you will let me treat myself with eucalyptus." On inquiry, he informed me that he had suddenly recalled the fact that some years before he had experi-

enced a series of chills while under treatment for the "same old stricture." The chills were pronounced malarial at that time, but did not yield to quinine. At the suggestion of a friend, the patient began the use of eucalyptus, with most satisfactory results. I had no objection to offer to the experiment and therefore put the patient on the oil of eucalyptus in ten drop doses thrice daily. The effect was all that could be desired, and stimulated me to a further trial of the drug, with the result that I am now giving it as a matter of routine. I will not attempt to give a series of cases in illustration of the value of eucalyptus, but will briefly mention two of exceptional interest.

A physician, forty years of age, upon whom I had performed an internal urethrotomy, developed a chill followed by fever on the second day after the operation. This was followed by a succession of chills and a temperature running as high as 104° F.

Through a peculiar combination of circumstances I did not see the patient until the fifth day, and found him engaged in the agreeable occupation of arranging his earthly affairs preparatory to what seemed to him to be the probable outcome of his condition. He had just had the most severe chill he had yet experienced and his temperature was 102½ with a prospect of the usual nightly rise to 104° or above. The urethral mucous membrane was covered with a diphtheritic exudate which occluded its lumen to a considerable degree. On investigation as to the possible source of infection, I found that the doctor's assistant who was superintending the after-treatment was in attendance upon a case of puerperal fever with a lacerated perineum, the perineum being covered with a diphtheritic exudate. As septic accidents following urethrotomy had been rare in my experience I felt warranted in the assumption that the infection was attributable to infection by the assistant.

The prospect was a little dubious, and I was correspondingly uneasy, although I reassured the patient to the best of my ability. Oil of eucalyptus in doses of ten drops every two hours was ordered, with the result that no further chills occurred; the temperature came down to normal within twenty-four hours, and convalescence was afterward uninterrupted.

Another case of interest is one in which retention with overflow from deep organic stricture, had existed for some days. The urine was strongly ammoniacal as withdrawn by the aspirator, and the case by no means a promising one. I was finally compelled to perform perineal section without a guide. After

a prolonged attempt to reach the bladder via the perineum, I performed supra-pubic section and retrograde catheterism, the urethra being freed from obstruction without further difficulty. Oil of eucalyptus was administered—ten drops every two hours. A specimen of urine collected twenty-four hours after the operation presented no ammoniacal odor, and on being allowed to stand in an open bottle in my office showed no traces of decomposition until the sixth day. As the room was quite warm this is worthy of note. I have repeatedly compared specimens of urine taken from the same subject with and without the previous administration of eucalyptus, and with results decidedly confirmatory of the value of eucalyptus. I am aware that an elaborate series of bacteriological studies should be appended to this brief paper, in order to demonstrate to some the value of the eucalyptus as a urinary antiseptic, but I believe that to the practical clinician the absence of such a report will by no means mar the practical suggestiveness of the paper.

The preparation of eucalyptus which is used is of considerable moment, as many are absolutely worthless. Sander's oil of eucalyptus is reliable, but that known as Tyndale's has seemed to me to be the most palatable and elegant of all those which have been submitted to me for trial. I believe, moreover, that it is perhaps the most trustworthy preparation upon the market. There is also a solution of eucalyptus with boric acid prepared by the same firm, that is an elegant and reliable preparation where the stomach does not well tolerate the oil. The addition of boric acid may also be of value.

My routine custom after operations on the genito-urinary tract, is to give ten minims of the pure oil of eucalyptus every two hours for two or three days, and thrice daily thereafter. Where practicable to do so, I prefer to give a few days' preparatory treatment with the eucalyptus before operating. Since beginning the use of the eucalyptus I have met with fewer post-operative annoyances than ever before, and I am confident that credit is due the drug.

SYPHILIS AS A DEFENSE IN BREACH OF PROMISE.

BY

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MEDICO-LEGAL history, so far as I can ascertain after an exhaustive examination, contains very little literature on this subject.

In February, 1882, the Supreme Court of North Carolina decided in the case of *Allen vs. Baker* that if the defendant contracted the disease subsequently to the time of making the promise, or if before and he knew, or by extraordinary diligence could have known his infirmity was incurable, he would be held answerable; but if it was contracted prior to the promise, and he had reason to believe it was temporarily only, he would be excusable.

A more recent, and in medico-legal literature, interesting and important case, was that of *Hamilton vs. Shackelford*, tried in the Masar Circuit Court, State of Kentucky, in July, 1890, and thence appealed by defendant to the Court of Appeals.

In this case the engagement of marriage was entered into in December, 1887. The defendant for defense and bar to the action alleged that prior to entering into the engagement he had contracted syphilis, that he had been treated by a physician in good standing in his profession and in active practice until the doctor advised him that he was free from the disease and could safely enter into the marriage relation. Believing this he entered into the contract in good faith with the plaintiff. Since that time, and through no fault of the defendant, the disease had reappeared upon him. Upon the advice of his physician that his condition rendered him unfit to marry, that the disease was still in his system, and that it would be communicated to the plaintiff in the event he made her his wife and availed himself of his conjugal rights, he broke the engagement.

The Circuit Court adjudged this defense not good and sufficient upon demurrer, but permitted defendant to plead same in mitigation of damages. The parties went to a jury and verdict was returned for the plaintiff for \$4,500. The defendant appealed to the Court of Appeals, which court reversed the judgment of the lower court and held that the answer of the de-

defendant presented a good defense and bar to the action, and excused defendant from the performance of his contract to marry plaintiff. The principle of law established by the court is, that if a man who had once had the syphilis believed in good faith and had reason to believe from the advice of a reputable physician that he was free from it and could safely marry, should enter into an engagement to marry, and during the engagement there was a reappearance of the case without any fault of his, that would endanger his wife, he would be released from his contract and relieved from any liability for damages for his refusal to marry.

100 West Seventh street.

Society Transactions.

THE AMERICAN DERMATOLOGICAL ASSOCIATION.

SEVENTEENTH ANNUAL MEETING. HELD AT MILWAUKEE, WIS.,
SEPT. 5TH AND 6TH, 1893.

DR. GEORGE H. FOX, *President, in the Chair.*

Cosmetics.—DR. ROBERT B. MORISON, of Baltimore, read a paper on this subject.¹

DR. JAMES NEVINS HYDE, of Chicago—Mr. President: I have listened to Dr. Morison's paper with a great deal of interest. Every year the use of cosmetics in the improvement of complexion attracts greater interest. Nothing has such a remarkable tendency towards beautifying the complexion of the face as what may be termed the "long lever." The face region only is the short lever. Fifty cases of acne treated by a cold sponge bath daily from the neck to the heels, if necessary with the addition of salt to the water bath, so as to make it in the highest degree stimulating, and followed with a flesh brush or coarse towel, furnish most surprising results. The skin of the body not only becomes firm and hard, but the complexion itself is improved to a greater degree than I have ever seen from any local application made to the surface.

I am quite skeptical about the benefit of treatment in pigmentations of the skin. Of course, they can be removed. We have all done it. With mercurial lotions, pastes, ointments, etc., there results an improvement in the skin, but it is only for a few weeks. What eventually happens to the skin treated in this way? As a rule, the complexion assumes an unpleasant color. It is a dirty skin, and suggests the complexion of a person who uses

¹ See page 425.

cosmetics. It has lost its freshness, and worse than this, it is a hyper-pigmented skin, actually worse for the local applications made. I am also skeptical with regard to the results of the methods of treatment in the several chloasmata. In the long run, we shall accomplish better results by the local treatment I have just suggested, and also by the internal treatment which is indicated by the condition of the patient.

DR. L. N. DENSLOW, Los Angeles, California—I was much interested in what Dr. Morison said in regard to the application of electricity to the face in the treatment of acne. Some five years ago I had a number of cases in which I first tried the application of a large sponge electrode on each side of the face. This treatment was continued for two or three months, two or three times a week, and the results were excellent. I am very glad to know that Dr. Morison has had such good results in the stubborn cases when other remedies had little or no effect upon the disease.

As regards treating spots, pigments and blemishes on the skin, I agree with Dr. Hyde. I believe that the great majority of them are not benefited in the least. I have been personally interested in one or two cases for several years, and they have not benefited by treatment. For two years I have treated a patient on general principles without any application to the skin, and within the last twelve or fifteen months decided improvement has taken place.

DR. W. T. CORLETT, of Cleveland, Ohio—I have been very much interested in the historical account given by Dr. Morison. I would simply say that history is still repeating itself. We frequently meet with patients who are using excreta for the various lesions to which the skin is heir. In acne urine is employed I suppose more for its irritating than its æsthetic effect.

A second point in Dr. Morison's paper I wish to refer to is the stimulating effect of electricity used for the destruction of superfluous hair. I have employed electrolysis for large as well as for small hairs, but whether or not electricity stimulates the remaining lanugo hairs is a question that I have not decided. I believe, however, its stimulating effect is decidedly less than local applications used for depilatory purposes.

In regard to the treatment of acne with electricity, I used it quite extensively at one time, but I cannot recall a single case which was materially benefited by it. Theoretically, I still believe it to be a useful agent in certain cases; such, for example, as in flabby, anæmic skins where the vigor that pertains to health is absent.

DR. H. R. CROCKER, of London, England—There were many points in Dr. Morison's paper that were very interesting to me, although some of them I do not agree with. However, it is the slight differences from which we get the advantage of meetings of this kind. We should be very careful how we apply cosmetics so as not to overdo them. Their use should be begun with delicacy, and later on their strength may be increased.

With regard to the local treatment of pigmentations of the skin, I will say it is very speculative and unsatisfactory.

Still, there are cases in which we are successful in treating them by applications of bichloride of mercury or by galvanism. We remove the pigmented epidermis, and for a time there is improvement, and so occasionally we do get benefit from this treatment. I tell my patients that treatment is more or less speculative, and that if they are willing to try it I am willing to

do so, but I cannot promise them any benefit, although they may get it. Every now and then we meet with patients who are willing to try treatment, and we meet with success in some cases.

The chloasmata are sometimes successfully treated by internal remedies alone. Some time ago a lady came to me with marked chloasmata of the forehead, but not dependent upon uterine disorder. On examination I found she was suffering from obstinate constipation. I gave her strychnia in the morning before breakfast, five drops in a tumblerfull of water, and slight laxatives, and regulated her diet. She followed this course for a considerable time with no local application whatever, and the pigmentation entirely disappeared in two or three months.

I was surprised to hear Dr. Morison say that he did not think electrolysis was of any service in the removal of superfluous hairs. It seems to me that in coarse hairs it is the only satisfactory method we have. One lady had so much beard that she happened to go out without her veil one day, and was caught by the police under the supposition that she was a man in woman's clothing. This stimulated her to have something done, and after treating her a whole Winter the result has been very satisfactory. Of course, you can see the smooth white scars of the face, but she was perfectly satisfied, and I think in looking at her you would say it was worth the time, trouble and money she expended upon it. I still recommend electrolysis for lanugo hairs. Caustics and depilatories might be used to destroy these hairs, but they are open to the objection of increasing the strength of the growth of the hair.

With regard to acne vulgaris, it is one of those diseases which is subjected by all kinds of treatment. There is no one method or series of methods that are always satisfactory. One has to take and treat these cases from a general hygienic point of view, including cold baths, astringents, etc. In acne indurata I invariably puncture the lesions as soon as they appear, syringe them out with some antiseptic, such as carbolic acid, 1 in 60, with a hypodermic syringe. Some of the most severe cases I have had, treated in this way three times a week, once a fortnight, or once a month, as the case may require, have been cured.

DR. H. W. STELWAGON, of Philadelphia—Like the preceding speakers, I was very much interested in Dr. Morison's paper, but I do not agree with him in regard to what he has said with reference to the use of electrolysis for the removal of hairs. My experience is that it is the only method that promises relief. It is limited to those cases, however, which have been described by Dr. Crocker, and when used in these cases it is extremely valuable. In the case of lanugo hairs, where the hairs are small and numerous, it is simply out of the question as an operation, because it is tedious and interminable. In those cases of extensive hair growth, even if the hairs be large, I believe the operation is really impracticable. I recall the case of a woman that I operated on seven or eight years ago for two or three consecutive Winters, with an average of five or six operations a week. The result was good. That woman was one out of a hundred, however, who would submit to such long-continued treatment. I damaged my sight with that one case, as we all know the operation is exceedingly trying to the eyes. It is now my rule to refuse operation where the hairs are very numerous, limiting it entirely to those cases where the hairs consist of from fifty to sixty or

seventy, and are coarse. In such cases the operation is eminently satisfactory.

In regard to the use of depilatories, I am rather surprised to hear Dr. Morison say that he has obtained excellent results from them. It seems to me that depilatories promote the growth of hair, the application almost always produces hyperæmia, and we really may get an increased nutrition of the hairs as a result. Furthermore, they are simply temporary expedients. I am surprised to learn that some gentlemen have seen permanent results from these remedies. The cases I have seen were materially benefitted for three or four or six weeks, at the end of which time the hairs began to regrow.

The reader stated also that in some cases of acne, where sulphur was used as an external remedy, we had a marked development of comedo. This is only too true, and in many cases does not admit of satisfactory explanation. I cannot agree with the author of the paper that his explanation is the correct one. One or two remedies which the doctor mentioned are, in my experience, excellent, and among them was boric acid. Of all remedies, it is the most efficient we have as a purely cosmetic one, and it is absolutely harmless. It unquestionably has an antiseptic effect, not only in cases of acne, but also in other cutaneous diseases. In those cases of harsh skin, a simple lotion of boric acid with a few minims of glycerine and alcohol combined with sulphate of zinc will often have an excellent effect. The same holds true of tannic acid, and there is one point in connection with the latter that interests me, as it is an excellent remedy for the prevention of sunburn. I know personally that if I go out fishing, for two or three days, I return home with a hyperæmic and vesiculated nose. I have experimented with several remedies. The past Summer I experimented with a lotion of tannic acid containing a proportion of calamine and oxide of zinc; this combination acted admirably and entirely prevented conspicuous redness, exfoliation and vesiculation. It is a combination which might be suggested for other such cases.

DR. JOSEPH ZEISLER, of Chicago—The subject of cosmetics is such a large one, and Dr. Morison has covered the ground so well in his paper that there is very little left for me to say. Besides, many of the preceding speakers have already mentioned some of the points which I intended to dwell upon. I cannot agree with what the essayist has said as regards electrolysis, but I am entirely in accord with Drs. Crocker and Stelwagon, for I, too, do not care to give it up as yet. I am longing for some other simpler method which will enable us to relieve patients of these undesirable growths, but until then we have in electrolysis an excellent means for the removal of superfluous hairs. I find the irritability of skins differs very much. In some women the operation will not leave any scar whatever, while in others there remain minute scars and permanent cicatrizations, which, of course, are undesirable. I would always require a trial treatment before promising any patient a possible success. I never operate on lanugo hairs, and it is my custom to discourage the operation in women who come to me with a fine growth of the upper lip. I confine the treatment to cases where the hairs are coarse and not too copious. If a case should present itself to me in which there are thousands of hairs, requiring treatment for many months, I would not undertake to treat it, but would rather have some one else take the case who could devote more time to it than myself.

In regard to warts, I have given this subject a great deal of thought on account of the fact that very intelligent patients assured me that they had warts disappear simply through the so-called treatment by charms, or by some of the antiquated house remedies. These statements have come to me from such reliable sources that I had no reason whatever to doubt them. Absolutely intelligent, educated people have told me that their warts have disappeared in that way. How it is done I do not know. I may mention in this connection my experience with cases where warts have occurred in such large number that I could not think of removing them by operative measures, but tried to remove them on the theory that possibly they were of an infectious nature. I distinctly recall a family in which two or three children had their hands and faces covered with warts. Locally I applied a solution of corrosive sublimate, and for internal use, without knowing exactly why, I prescribed a strong cathartic, sulphate of magnesia, which has been suggested from different sources. This treatment was followed by exceedingly gratifying results, and since that time I have laid aside the curette, scissors, and other mechanical means, and have frequently, where warts were numerous, at first resorted to this means with good success.

The chief interest of the paper and naturally of this discussion is the treatment of acne, because it is for this disease that our aid is most frequently looked for. It is here where we are most desirous to have good results, for the cases of acne that come to us are mostly young women often of the best classes, who are anxious about the treatment and its success. My treatment of acne in the last nine years has been modified very much. When I started out with the teachings of the Vienna school, based upon the principle of treating acne by local means chiefly, my results were not permanent and gratifying. But since I have paid more attention to the general treatment, such as diet, hygiene, the condition of the bowels and so on, my success has been constantly growing better. I find in one measure a very valuable aid in the treatment of acne, and that is the internal use of ergot. I first came to use it on account of irregular menstruation, and I have gradually used it pretty generally for the influence it exerts upon the vasomotor nerves, upon the circulatory organs, and upon the different glands in general. I have during the last few years, at the suggestion of Dr. Fox, used the curette very liberally. In this way a great many blackheads are removed which otherwise would have to be pressed or squeezed out individually. The curette acts as a sort of local massage, and I esteem it very highly in the treatment of facial acne. In some cases that resist treatment on account of the large number of indurated lesions, I have come to use a method in the last year which has been exceedingly gratifying to me, and that is the application to isolated acne nodules or pustules of a strong corrosive sublimate solution in collodion, two or three per cent., gently painted on the nodules or pustules. If the treatment is carefully carried out, no fear need be entertained that scars will result. A great point in the treatment of acne is not to adhere too strongly to this or that remedy, but to employ a combination of all possible measures. Any one who rides a hobby in treating acne will not be successful, but he who considers his cases from all points and uses local as well as constitutional treatment, paying attention to hygienic measures, etc., will probably be very successful.

DR. W. A. HARDAWAY, of St. Louis—I presume that Dr. Morison, in discussing the question of cosmetics, had no idea of leaving out of consider-

ation proper internal treatment and attention to hygiene. A properly regulated diet stands first in importance; without this all of our efforts would be in vain. Cold sponging with vigorous friction of the skin is also an absolute essential. The use of strong lotions of bichloride of mercury to remove chloasma is to be deprecated on account of the serious local results that may follow.

I have long used galvanic massage to the face in acne and comedo, but I cannot endorse the extravagant claims made for it by Bartholow some years ago.

I believe I was the first physician to employ electrolysis for the destruction of superfluous hair on the faces of women, and after eighteen years of almost daily employment of this operation I still regard it as the only trustworthy method. It must be gone about with skill and patience and full knowledge of the technique. So far as I have been able to determine the lanugo hairs are not stimulated to increased growth by the operation. The use of the various depilatories is worse than useless.

DR. GEORGE T. JACKSON, of New York—In the removal of scars, especially the hypertrophied ones, I have tried electrolysis, but have not been so successful as some practitioners. I quite agree with Dr. Hardaway and others that it is the only thing we have to destroy hairs. We hear from time to time extraordinary stories of patients who have gone to Paris to have superfluous hairs removed without electrolysis, and after that they have had no more trouble with them. I do not know what it is they do in Paris, but I am skeptical in regard to these stories. The very fact that we have so many patients come to us who have tried a great many depilatories is proof of their uselessness. In the case of growth of fine hairs I refuse to operate. I do not like to operate on lanugo hairs. It is better to wait a while until the hair grows coarser. The trouble with electrolysis is that most people are in too much of a hurry. It is well to proceed slowly. Some ten years ago, through the kindness of Dr. Fox, I had the privilege of working on one side of a patient's face while he worked on the other side. I kept an account of every hair I took out, and removed 8,000 hairs. If you do not keep an account of the hairs you have removed patients will come back to you and complain that you had done little or no good; whereas if you can tell them that at the last series of sittings you removed 400 or more, as the case may be, they can but see the improvement when at the second series a much smaller number is removed. We worked on this patient for two years. I met her within a year afterwards on a train, and she was perfectly satisfied. When she came under treatment she had a full beard, nearly as full as that of a young man of 21. When I last saw her no one would think for a moment that she ever had any hair on her face, and there was no scarring left by the operation. Of course, we sometimes produce scars. It seems to me that they are due to some individuals' peculiarity of skin. They are exceptional.

In regard to warts. They always disappear mysteriously. No one has ever seen a wart fall off. Children go to bed with them, and when they get up the warts are not there. We have a large number of remedies for warts. They can be removed from children by the use of common milk-weed, though it does not always succeed.

DR. MORISON (closing the discussion)—I did not mean to imply in the paper I presented that we should ride hobbies. The remedies mentioned by

me were simply adjuncts to other treatment. I presented the paper as a matter of personal experience. I do not wish to go on record as not believing in the use of electrolysis. I do not use it myself any longer because it is so tedious and wearisome. I know it will remove hairs, as I have proved by experience and by what I have written. In large hairs I do not think there is any doubt about its being the best treatment. I cannot give up to it the necessary time for use at home, as I have no assistant to help me. In the last ten years I have not had a case of increase of growth of hair from the use of depilatories. I believe in local treatment, and I also use internal treatment to try to get the patient in a good condition by baths and other things; but without local treatment I do not think many skin diseases can be cured.

A Case of Rhinoscleroma.¹—DR. GEORGE THOMAS JACKSON, of New York, reported a case of this affection.

DR. JOSEPH ZEISLER—I am glad to hear a case of rhinoscleroma reported in this country, as it has been thought that these cases do not occur here, whereas it is known that they occur principally in Austria and Poland. I have seen three or four cases in Kaposi's Clinic, but have never met one in this country. All of the cases I have seen were in Polish Jewesses. It strikes me, from the picture which Dr. Jackson has presented, that the case is not a typical one of rhinoscleroma. Nearly all the cases I recollect were characterized by a peculiar broadness of the nose and enormous infiltration of the nostrils, so that they were almost closed by the new growth. I do not wish to doubt the diagnosis, but the picture suggests that it is a case of cheiloscleroma rather than of rhinoscleroma.

DR. H. R. CROCKER—Of the cases reported in England of rhinoscleroma one was a Spaniard. I have had no cases in my practice.

DR. JAMES NEVINS HYDE—I have seen but one case of rhinoscleroma in my life, and that was in Vienna. Dr. Jackson's case does not suggest the typical forms of rhinoscleroma that we have either seen or studied in the plates; at the same time, I do not think that we should doubt the diagnosis. We are not justified in dogmatizing about a disease which is so very rare, and which figures so slenderly in the records of this Association. If one were to forecast the future he would prophesy that rhinoscleroma is a disease not to be confined exclusively in the future to Austria. One day it may be identified with tuberculosis and keloid; and some forms of keloid certainly point to tuberculosis.

DR. JOSEPH ZEISLER—I would not like to be understood as doubting the diagnosis in Dr. Jackson's case of rhinoscleroma. A sclerotic condition of the upper lip is quite characteristic of the disease.

Circumscribed Scleroderma.²—A paper on this subject was read by DR. WILLIAM T. CORLETT, of Cleveland.

DR. H. R. CROCKER—There have been mixed cases recorded which have begun as morphœa and have developed into a more diffuse scleroderma. The main point, in my opinion, is that morphœa is primarily a superficial condition, occurring in the upper layers of the cutis, while scleroderma begins in the deeper and subcutaneous layers. Morphœa may travel down and

¹ See page 381.

² Will be published.

become adherent to bone, while scleroderma may become more superficial, and the gray-white parchment patches in scleroderma look like those of morphœa.

DR. H. W. STELWAGON—My experience has been small in regard to morphœa. I have always considered it, in the light of reading, as a separate disease. I have seen four or five cases, and in none of these were there any symptoms which pointed to true scleroderma. I believe the two diseases are very closely allied, and that probably the same underlying condition is responsible for both. We know that in anæsthetic leprosy we find cutaneous changes almost identical with these several affections—spots, lines, morphœa patches, etc.; all of these symptoms are probably due to the same underlying nervous or vaso-motor influences.

DR. JAMES NEVINS HYDE—I have been much interested in this paper. It has been my fortune to see quite a number of interesting cases of morphœa, but have never known the circumscribed forms to be followed by generalized scleroderma, several in which there was complete disappearance of the lesions. Many of these cases are unilateral, or irregularly bilateral, that is, occurring upon one side of the upper portion of the body, and on the other of the lower portion or the reverse. I have seen two interesting symmetrical cases. In one there was a typical patch with lilac-tinted border and telangiectases running over the surface. Most of the cases I have seen recently were of delicate young girls, persons in the state vaguely defined as neurotic. But I have lately had a typical patch in the person of a powerful blacksmith, engaged all the day in shoeing horses.

DR. JOSEPH ZEISLER—Dr. Corlett has given us a classical description of what we all consider as morphœa, or in other words, a form of scleroderma en plaque. It is particularly interesting to notice the color changes of these plaques. The purplish hue is characteristic in the beginning, and the pigmentation which the doctor mentions is one of the latest symptoms. While these cases are fairly common, generalized scleroderma seems to me to be quite rare. In one of these latter, which I recently observed, the upper half of the body was involved to the hips. It began in the neck, which is frequently a starting spot for scleroderma. The case was that of a little girl about fourteen years of age. These cases are probably associated with trophic lesions starting from the spinal cord, or again, in the cases of morphœa, due to trophic lesions *in loco*. In one of these, forming a typical sclerotic plaque on the posterior part of the neck, I noticed at the same time a complete alopecia on the area which extended up into the scalp.

As regards the treatment, I have had good success by the use of massage. Dr. Corlett did not mention this. I had one case in which there were four bands on the left arm, and under massage, continued for about five or six months, the case improved very much.

DR. W. A. HARDAWAY—I am not in a position to dispute the connection between scleroderma and morphœa, but in view of the marked clinical differences I think it well to retain distinct titles for the two affections.

DR. R. B. MORISON—A word as to the apparent rarity of this disease. I have been in charge of a large clinic for eleven years in Baltimore, and I have never seen in public or dispensary practice a case of morphœa. I have been looking for it. The only case I have ever had was in private practice, the lesions of which developed on the inside of the thighs. I think that the rarity of the disease must be due to the fact that such cases are not sent to

the dermatologist, but are treated by the general practitioner. The only case I ever saw outside of private practice was in St. George's Hospital, London, in 1886, which developed in the face. This was a case of Dr. Cafava.

DR. JAMES NEVINS HYDE—My friend, Dr. Hardaway, will, I think, amend his statement if I call his attention to it. None of us has seen many cases of generalized scleroderma, but probably all have seen a few, and I would like to have him modify the distinction he made between morphœa and scleroderma, circumscribed and generalized.

With respect to the question of gravity, the prognosis in young subjects, say fourteen or fifteen years of age, with generalized scleroderma, is not as grave as was once thought. Not many cases of morphœa develop in middle life; they almost always occur in young subjects. In advanced subjects of scleroderma, the prognosis is unfavorable; but in young subjects the prognosis is better. When removed to a proper climate, it is astonishing how, under the influence of proper hygienic surroundings, without our old friend, the arsenic, these patients improve, and all the apparently dangerous symptoms subside.

DR. H. R. CROCKER—In my previous remarks I hardly touched upon scleroderma, but spoke more of morphœa. The number of cases any one individual sees of scleroderma is not large. My idea of the prognosis is this, that there are cases of the firm and œdematous variety, and there are other cases which are simply hard, in which you can make no impression by pressure. These cases begin with œdema, and are liable to run on to atrophy and imperfect recovery. They may also begin with induration without possible pitting. I have seen two or three cases of general scleroderma. I had one case of the atrophic form, which first came under my observation during the life of Dr. Tilbury Fox. It was observed off and on for a dozen years, the patient ultimately dying of heart disease. She entirely recovered from all induration. There was extreme crippling of the fingers, and her face was wasted and thin. You could pinch the skin anywhere. As far as scleroderma was concerned she recovered. At the post-mortem examination I removed the little finger, made a section through the ankylosis, and found it was entirely fibrous. The œdematous cases have a worse prognosis than the firm cases.

DR. L. N. DENSLOW—I would like to call attention to one case I had several years ago. The gentleman, a clergyman, was 45 years of age. The lesions developed on the side of the chest, which he had for two or three years. It was of the hard variety. The prognosis is unfavorable in middle life, but favorable in young subjects. In this case I simply ordered a general hygienic diet and salt baths, as well as electricity, which he used himself for a year, with entire disappearance of the lesions and complete recovery. The case was of the hard variety from the first.

A Case of Tuberculosis of the Skin Stimulating Lupus Erythematosus.
—DR. W. A. HARDAWAY, of St. Louis, read a paper with this title, with the clinical presentation of the case.

The patient was a pharmacist, twenty-eight years of age, previous health good, family history good, and no history of tubercle. In May, 1892, he noticed on his left malar region a small yellowish elevation the size of a pinhead. This was supposed to be a flesh-worm, and was squeezed, blood only being thereby obtained. The lesion gradually enlarged peripherally, becoming hard and red. He came under Dr. Hardaway's care in June,

1892, the lesion being now as large as a dime, presenting an atrophic whitish centre surrounded by a slightly raised infiltrated border of a dull red color. The lesion was anæsthetic, a characteristic which has been noticed in tubercular syphilides. The anæsthesia was temporary. In a short time the patient passed from under observation and was gone for a month, during which time he was thoroughly treated for syphilis by another physician. The treatment simply aggravated the general and local conditions.

September 3, 1892, the original lesion was the size of a half-dollar, not raised from the surface, and moderately infiltrated. The centre is still atrophic, and the same narrow, dull, red line presents at the borders. In a few weeks several small acniform pustules appeared on the right temple, side of the nose, and inferior angle of the right eye. Others presented on the end of the nose, right ala, and left cheek. These lesions were not painful or itchy. Each lesion was surrounded by a red areola, which subsequently extended and became infiltrated, crusts forming over the centres of the lesions. The crusts were fatty or sebaceous in character, and with a dull red surface beneath were suggestive of lupus erythematosus. As the borders of the lesions extended the centres cicatrized, presenting the same dirty yellow appearance of the original patch.

December 9th, thiosinamine was given hyperdermically at 12 M., and the patient stated that about 7 P. M. the patches became hot and red, remaining so for an hour or two. Other injections of the drug were subsequently given, but without effect.

December 22d, the lesion in the right eye had become as large as a quarter of a dollar. Electrolysis had been tried on the spot on the left temple, but it was still spreading. A new spot was now found on the chest, beginning like an acne papule, which became pustulated and finally scaly. This went through the same metamorphosis as the previous lesions, the elevated red border extending until the lesion was as large as a pea, when it was thoroughly destroyed by electrolysis.

Early in January a small piece of skin was excised from the lesion on the right temple and examined microscopically. Electrolysis was tried upon the other lesions with an apparent cure, followed by a relapse after a few months, manifesting itself first by the formation of a scale in the centre of the scar. Electrolysis was persisted in as fast as the spots appeared, and with apparent success.

In March a small patch similar to the others appeared upon the scalp; this is now the size of a dime. The tendency to peripheral extension throughout has been a marked feature in this case. The whole nose finally became involved, and became a continuous lesion of partly red and partly cicatrized integument, presenting a striking likeness to some forms of lupus erythematosus. Dr. Hardaway thought that this resemblance would have been more striking if the patches on the side of the face had been allowed to coalesce instead of being destroyed by electrolysis.

At no time could nodules of lupus vulgaris be demonstrated, nor were the sebaceous plugs of lupus erythematosus seen at any time. The patient's general health has continued so poor that at one time general tuberculosis was considered imminent. A trip to Colorado brought about great improvement. At last accounts the disease was apparently quiescent, the patient's general health good, and no lesions of the lungs and larynx have been detected.

Dr. C. Heitzmann reports, after microscopical examination of the excised piece of skin, that a moderate number of tubercle bacilli were found. A large number of inflammatory corpuscles were also detected displacing the fibrous connective tissue. Nests of inflammatory corpuscles were seen in the arrangement characteristic of tuberculosis. The diagnosis was local tuberculosis of the skin, which was entirely in accord with the clinical diagnosis.

DR. H. R. CROCKER, of London—I am very much interested in Dr. Hardaway's paper. I think dermatology is indebted to all who take the trouble to record cases of this kind. With physiological and bacteriological investigation I am inclined to view that there are some remarkable cases, or types of disease connected with tubercle bacilli besides lupus vulgaris and scrofulous dermatitis. I hold to the fact that the discovery of tubercle bacilli would exclude lupus erythematosus. So far as I am aware, I do not think that in any undoubted case of lupus erythematosus tubercle bacilli have been found. One point struck me very forcibly, and that is, the doctor said there was a patch upon the scalp. I was much struck with the extreme rarity of lupus vulgaris upon the scalp, while lupus erythematosus upon the scalp is as common as the disease itself. The number of cases in which lupus vulgaris affects the scalp is rare indeed. I only recall one case in which it was so. It was one of the worst cases I ever saw. The patient was of middle age, and the disease spread over the face, completely denuding the scalp of hair. Her face was highly inflamed with lupus vulgaris, which was much aggravated by previous active treatment, and which she called "horrid German plasters." I think active cases of lupus are better let alone, they are *noli me tangere*. I think there is a case like Dr. Hardaway's recorded by Dr. James in the *British Medical Journal* in full, with photographs and histological examination. The case was an anomalous one of tuberculosis of the skin which nobody recognized until a histological examination was made.

DR. W. T. CORLETT—I wish to mention in this connection a clinical feature of lupus erythematosus, which it seems to me mitigates against its being a form of tuberculosis, and that is its great variability. Sometimes it completely disappears for months at a time. Again, it is aggravated by various conditions of the organism, notably at the time of menstruation. This important feature of the disease is admirably illustrated in a case, now under the care of my able colleague, Dr. Hyde, which at one time disappeared for more than a year. Nor did the eruption always occupy its former sites. Clinically lupus erythematosus does not conform to my idea of a tuberculosis of the skin.

DR. JAMES NEVINS HYDE—This is a broad subject, for the limited time at our disposal. The field of tuberculosis of the skin is enlarging every year with the advance of our knowledge; and we recognize now a difference between lesions with regard to the number of tubercle bacilli in each. Some are rich in micro-organisms, and some relatively poor, as for example, lupus vulgaris. We shall eventually find tubercle bacilli in lesions of the skin where now they are not suspected. In the paper here presented to us there is a volume of evidence that no man can possibly deny. Do not misunderstand me. I am not here to say that I believe lupus erythematosus should be classed with the varieties of lupus. I separate them entirely; but the term lupus erythematosus we now apply to a number of very different

lesions of the skin. Every paper on lupus erythematosus suggests one or more of these different clinical forms to us. That some of these forms do exist with generalized tuberculosis there can be no question whatever. In a lately reported case of pulmonary tuberculosis, tubercle bacilli were found in several portions of the body, but none in a patch of lupus erythematosus. The patient died of tuberculosis. A post-mortem examination was made, and the internal organs were found in a tuberculous state. These cases we cannot ignore. We have tuberculosis cutis verrucosa, and an official form in which ulcers form about the mouth and anus in tuberculous patients; also an acniform group of tuberculosis.

In the last number of the *Journal of Cutaneous and Genito-Urinary Diseases*, Brocq in his letter of correspondence refers to the doubt suggested respecting the diagnosis of the cases which Hallopeau describes as *folliculites decalvante*. Some lesions of the scalp we do not yet call tuberculous, where the tubercle bacilli may yet be found. The knotted indurations and the cicatricial alopecias of the scalp are presumably of this type.

Apropos of Dr. Hardaway's interesting paper, Professor Nicholas Senn lately invited me to see one of his patients in hospital. The man was evidently in an advanced stage of pulmonary tuberculosis. Near the rectum on one side was a perfectly typical ulcer somewhat larger than the tuberculous ulcers near the orifices of the body, lately recorded as the only form of tuberculosis of the skin. On the other side, on the buttock, was a patch which was pronounced to be lupus erythematosus; well defined, slightly elevated and covered with adherent scales. In this case there was no sign of ulceration, of vesiculation or of pustulation. If it was not lupus erythematosus it was very much like it. We are not in a position to dogmatize on these points. It is the safest in the long run to hold that tuberculosis is one of the most general of the diseases of the human family. We recognize its invasion of every organ and tissue of the body, and some of the rare forms we are now unable to explain will eventually be recognized as tuberculosis of the skin.

DR. HARDAWAY (closing the discussion)—My principal object in reading this paper was to call out discussion. I believe that many clinical conditions that we are in the habit of labelling lupus erythematosus really represent tuberculosis of the skin or the erythematoid lupus vulgaris of Leloir. I believe my case illustrates a type of tuberculosis cutis hitherto undescribed. In this connection I cannot refrain from referring to the two unusual cases of ordinary lupus erythematosus, which developed the disease generally, that I have reported before this Society. They illustrated the disseminated type of Kaposi, and in both instances the patients died—one from general tuberculosis, the other from a septic condition that was also, probably, tubercular. It is probable that the initial skin eruption was tubercular, but in the outset, at any rate, the clinical aspect was that of butterfly lupus erythematosus.

(To be continued.)

NEW YORK DERMATOLOGICAL SOCIETY.

226TH REGULAR MEETING.

DR. ELLIOT, *President, in the Chair.*

Lupus Erythematosus.—DR. LUSTGARTEN presented a young woman

suffering from lupus erythematosus of the face and scalp, whom he had treated about a year ago on the face with cautious applications of the Paquelin cautery and with scarifications. While the affection formerly was of the common follicular and macular type, the single plaques, especially those of the cheeks, now present in the center the appearance of scleroderma-like, slightly depressed whitish indurations about one-half inch in thickness, surrounded at the border by an eruption resembling erythema centrifugum.

DR. FORDYCE remarked that the morphœa-like conditions of some portions of the affected part were peculiar.

DR. KLOTZ said that from the present condition of the patient he could not make the diagnosis of lupus erythematosus, some of the characteristic features of this disease being absent, particularly the well-defined border and the peculiar scaly crusts. He had, however, no reason to doubt the correctness of the diagnosis.

DR. ELLIOT was particularly interested in the treatment with phosphorus, which he had used in a number of cases without any decided benefit, though it had been kept up for a number (even six) of months at a time. The thickening of the affected portions present in this case he considered as independent of the process of lupus erythematosus itself. He had observed, however, similar conditions in other cases which were a part of the disease, and which disappeared during the treatment of the lupus erythematosus. In the treatment of the process he had seen most excellent results from the use of the Paquelin cautery, superficially applied, not cauterizing, but only scaring the surface.

In reply to questions by Dr. Morrow, Dr. Elliot said that he preferred the micro-paquelin to the galvano cautery and to scarification. He was inclined to consider lupus erythematosus as a neurotic disease, not a parasitic one, and the effects of the Paquelin, he thought, was through the stimulating effect produced on the peripheral nerves. He did not think that the blood-vessels were influenced by the treatment.

DR. LUSTGARTEN said that from the discussion he felt satisfied that the morphœa-like condition is of rare occurrence in cases of lupus erythematosus. In his experience the Paquelin gave good results in superficial cases. The swelling of the tissue he did not think was caused by the treatment.

Case of Lepra.—DR. LUSTGARTEN presented a young man, 27 years of age, born in Western Prussia, Germany, eight years in America. He left San Francisco, Cal., on June 15, 1892, for Valparaiso, Chili. After he had been there five weeks an eruption appeared on the face. On his return to New York in January, 1893, he showed a group of small, brownish, papular, moderately firm efflorescences, with a few dilated blood-vessels on the top, on the side of the nose, a smaller group below the right ear and a larger one on the right side of the chest. There was no anæsthesia; no lepra bacilli were found in the fluid obtained by incisions. He was cured under the use of iodide of potassium and mercurial plaster, which he was given for the benefit of the doubt. Recently the eruption has appeared again on the nose.

DR. FOX said that the lesions on the nose did not seem at all characteristic of lepra to him.

DR. SHERWELL agreed with Dr. Fox that the leprous nature of the lesions present was by no means obvious.

DR. MORROW, in the present condition of the patient, could see actually nothing even suspicious of a leprous character. Leprosy, however, like syphilis, was not a disease of continuous symptoms; periods of activity alternate with periods of repose in which there are absolutely no characteristic symptoms, so that he might agree with the diagnosis if proof of the former presence of more typical lesions could be furnished.

DR. LUSTGARTEN said that he had not had the intention to convince others of the correctness of the diagnosis of leprosy, because he was not firmly convinced himself; he had presented the case more on account of his strong suspicion, so that he might refer to the present condition if further symptoms should ever develop afterwards, and on account of the very early stage, which in this country is hardly ever observed.

Case of Leprosy.—DR. BRONSON presented a patient with well-marked signs of leprosy, with a history of two years' standing, who had spent the greater part of his life in Hoboken, N. J., and who had never lived in any other country than this except Germany, where he was born. The disease had begun with general debility, which had gradually increased so that for nearly a year he had been incapacitated for labor. The skin showed numerous tubercles in various parts of the body, together with pigmentary anomalies (chloasma and vitiligo) upon the trunk and commencing ophthalmia with iritis. The patient has a family, with which he lives. No other cases of leprosy have been observed in the neighborhood.

DR. LUSTGARTEN said that the case was a typical one of leprosy. As the patient had lived in Hoboken since 1857, contagion by circumstantial infection suggested itself.

DR. MORROW said that the case was undoubtedly a typical one of leprosy. As to its etiology, which was the most interesting question, the case was one of those sporadic ones of which the immediate source of infection could not be traced, although the chances for contracting the disease were certainly not so rare as are generally supposed. He would not be surprised to see within ten years a number of cases of leprosy, which would have developed in this country, in people who had always lived here. The incubation was such a prolonged one and the course of the disease itself so insidious that even a careful person would not be able to trace the origin to its proper source. The initial symptoms, like in the present instance—the itching, burning sensations and pains in the legs—were so vague and obscure that they generally were referred to other more common causes, like rheumatism, etc.

DR. FOX had no doubt about the diagnosis of the case. As to the etiology, he thought that the patient might have contracted leprosy from some foreign sailor. That he has lived for thirty-six years with the disease without its appearance within his family or immediate surroundings showed that the danger of contagion was but a very slight one, as well as that of the spreading of the disease. He, therefore, did not believe in the necessity of segregation of the patients.

DR. BRONSON did not doubt the diagnosis either; the chief interest in the case concerned the etiology. The way of contraction of the disease certainly seemed quite mysterious; he could not readily believe in the infection from a sailor. Hundreds of people were exposed to the same danger of infection without ever getting the disease.

(To be continued.)

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A CASE OF DOUBLE NEPHROLITHOTOMY.¹

BY

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THE comparatively rare occurrence of calculous disease in both kidneys of the same subject, and the still rarer occurrence of pyonephrosis or other symptoms which call for operation upon both organs (for there can be no doubt that many kidneys which contain one or more calculi perform their functions throughout life without giving rise to serious symptoms), as well as the many risks attending double nephrolithotomy, whether both kidneys be operated upon at the same time or not, must be my apology for presenting a condensed report of the following case:

E. B., a French Canadian, aged 36, was admitted to the Montreal General Hospital on the 2d of February, 1892, with right pyonephrosis and an old and light stricture of the urethra six inches from the meatus. There was no family history of tuberculosis, and the patient had always enjoyed good health until eight years previous to admission, when he contracted gonorrhœa, and within eight days was seized with a severe acute left sciatica, for which he was treated for three months in one hospital and eighteen months in another. One year after recovery he was treated for stricture by dilatation at one of the aforesaid hospitals, and some months later he was treated for

¹ Read at the 7th Annual Meeting of the American Association of Genito-Urinary Surgeons, at Harrogate, Tenn., June 20th and 21st, 1893.

stricture again in the Montreal General Hospital. He remained well and never had any kidney symptoms until January, 1891, when he was seized with a severe pain in the right side with some swelling in the right hypochondrium and constipation. He suffered for ten days, but was only away from his work for three days. He continued his work, although at times he did not feel well, and had more or less discomfort about the right side until Christmas, 1891, when he was again seized with a very severe pain in the right lumbar region which lasted about three days, and then suddenly left him. An attack of influenza (*la grippe*) followed, then chills and fever, vomiting and constipation. The pain returned about the 6th of January, and the swelling became evident (to patient) a week later. On admission, February 2d, patient was fairly well nourished, but very ill, with rapid pulse, septic temperature, constant nausea and constipation. There was a firm but somewhat indefinitely outlined tumor about as large as a foetal head in the right lumbar region of the abdomen, slightly tender on pressure, and immovable. The urine contained a large quantity of pus and albumen. Under observation the tumor varied in size from time to time, and I was enabled to diagnose a pyonephrosis of probably calculous origin. I was in doubt as to whether I should operate first upon the kidney or the stricture. On the one hand, the kidney condition called urgently for relief. On the other, I dreaded the consequences of possible retention of urine and difficult catheterization after a nephrolithotomy, specially in the septic condition of the patient, as above described. I did not entertain the idea of operating upon both at the same time. I finally decided to operate upon the stricture first, and did so on the 27th of February. The operation was internal urethrotomy. First making a section of the stricture on the roof of the urethra with Guyon's small Maisonneuve instrument, then making a section of the floor of the urethra and dilating with Otis's divulsing urethrotome, and finally a perineal section for drainage. With the exception of some slight hæmorrhage from the perineal wound there was no further trouble with the stricture, and on the 12th of March I proceeded to operate upon the kidney tumor, which had now become considerably reduced in size. A large branched calculus weighing about 400 grains was removed by section into the substance of the organ. There was very little pus. The patient rallied well from the operation and urine flowed freely from the wound. His general condition rapidly improved, fever disappeared, appetite returned, and he began to gain in weight. The urine still contained pus, though in much smaller quantity than before operation. After a time occasional attacks of pain in the right groin and bladder were complained of with frequency of micturition. These symptoms led to an exploration of the bladder in search of stone, but with

negative results. The wound was completely healed by the 25th of April, and the patient was discharged on the 28th of May, 1892, well and free from pain, but with still some pus and albumen in the urine. On the 18th of October, 1892, he returned to hospital stating that he had attempted to resume his work two or three times during the Summer, but had been unable to continue it owing to weakness and pain in the left lumbar region. There was also a history of several attacks of left renal colic. On examination the left kidney was found to be enlarged and tender and the urine, which was small in quantity (about 20 ounces per day), contained a large quantity of pus. Patient's general condition was poor and his temperature ranged from 99° F. to 101° F. Operation was performed at one o'clock P. M. on November 17th. On exposing the kidney a thinned fluctuating spot of kidney substance was incised. About eight or ten ounces of pus escaped and through this wound were removed two branched and three small faceted calculi with a quantity of fragments of stone—evidently the result of spontaneous fracture. The operation was completed without delay or accident and the wound loosely packed with iodoform gauze, but the patient did not rally well. He remained weak and pale, with rapid pulse and a tendency to vomit. During the afternoon champagne and weak beef tea were ordered, but he could not retain them on his stomach. Patient perspired freely, but passed no urine nor was there any oozing from the wound. The pulse continued small and rapid, 120, temperature subnormal, 97.5° F. And the general condition was that of a man suffering from the effects of an exhausting hæmorrhage. In a few hours the temperature become normal, although the pulse still remained small and rapid, and the restlessness, vomiting and prostration persisted until the first urine was passed at 11 A. M., November 20th, two days and twenty-two hours after operation. During this time a catheter was passed regularly night and morning, but there was no urine in the bladder. The suppression of urine, to which I attribute the foregoing symptoms, was treated as follows: a mixture of infusion of digitalis and liquor ammoniæ acetatis was first given, but each dose was rejected as soon as swallowed. Inhalations of nitrite of amyl, (three drops every four hours) were next given, and next morning a hot-air bath and a hypodermic injection of tincture of digitalis (3 ss.) Twenty-four hours after operation the dressings were renewed and eight ounces of normal salt solution injected into the subcutaneous tissues of each thigh. Patient's condition seemed better after this infusion of salt solution, which was repeated in twenty-four hours. At 11 A. M. on the 25th 2 ounces of urine were passed and in the next twenty-four hours 7 ounces. In the next twenty-four hours 19 ounces and in the next 35 ounces. In the meantime the symptoms all im-

proved. After the first day the urine was perfectly clear and free from blood or pus, the vomiting ceased and the further progress of the case was uninterrupted. The urine has continued clear ever since, averaging from 40 to 70 ounces, and containing only a trace of albumen. A sinus persists, from which some fragments of stone have escaped at times, but as no urine has ever escaped through it I believe it to be entirely perirenal. Patient's general health is good and his only complaint is to discharging sinus due probably to some fragments of stone lodged in the perirenal tissues.

Up to the present time only four cases of double nephrolithotomy has been put on record in surgical literature. Two of them ended fatally soon after operation and two recovered. They are as follows :

(1) In October, 1890, Dr. F. Lange presented (for the second time) at a meeting of the New York Surgical Society, a male patient on whom he had about five or six years before done nephrolithotomy on both sides. The operation on the right side was done six or seven weeks after the first one (that on the left), for complete retention of urine in the pelvis of the kidney, and he was lucky in removing from the ureter an impacted clot consisting of gravel and blood. There was also an abscess in the substance of the kidney which was opened. The patient had been in fairly good condition ever since, especially about the time when he had presented him to the society some three or four years ago. The wound on the left side by which a large quantity of stones had been removed had, however, never healed entirely except for short periods. A fistula still persisted and through it repeatedly small stones had been extracted. Lately the urine had again become more cloudy. At the bottom of the sinus some stone could be felt. (*New York Medical Journal*, vol. 1, 1891, p. 78.)

(2) On the 15th of December, 1886, Mr. H. W. Page operated in St. Mary's Hospital, London, upon the left kidney of a man aged twenty-two, from whose bladder stones had been already removed on two different occasions by perineal lithotomy. A transverse incision was made in the loin, but the kidney could neither be seen nor felt. A large cyst, however, was found and freely incised, and gave exit to pus and two small calculi. The kidney was found high up under the ribs, being very shrunk and small, but containing no calculus. In the latter part of January pain appeared. On the 18th of February the quantity of urine dropped one half, and in the next few days rose again with a vast increase of pus. There was also a return of renal pain. On the 25th of February the right kidney

was exposed. It was found surrounded by stinking urinous pus. The kidney was considerably hypertrophied. No stones were found. Some collapse followed operation, but the patient did well. The wound healed slowly and did not close until the 8th of May. Patient left hospital on the 26th of May, and a week afterwards passed four small calculi after a slight attack of pain. Since then he has been free from all pain and gained steadily in health and strength. (*Medico-Chirurgical Transactions*. London, 1888, vol. 71, p. 239.)

(3) In November, 1888, Mr. R. J. Godler operated upon the left kidney of a gentleman aged thirty-seven, removing a large mass of uric acid and phosphate stone weighing 832 grains. The patient made a rapid recovery, but the closure of the wound was not permanent. During the next year the patient suffered from a series of attacks of high fever, drowsiness, diminished secretion of urine and once a stone was passed. Accumulation of pus and urine occurred in the left kidney, and at one time the ureter became completely blocked and an operation was undertaken to remove a stone which was supposed to be obstructing it. None was found, but the ureter became patent after the operation and the state of the kidney very much improved. A rubber plug was worn in the fistula to prevent these accumulations. Symptoms pointing to stone in the right kidney, it was operated upon on the 19th of November, 1890, and 480 grains of stone removed. Patient died suddenly an hour and a half after the operation as a result of hæmorrhage from the kidney. (*Medico-Chirurgical Transactions*. London, 1891, vol. 74, p. 141, and *Lancet*, vol. 1, 1891, p. 144.)

(4) On the 23rd of July, 1890, Mr. G. R. Turner operated in St. George's Hospital, London, upon both kidneys of an intemperate woman, aged 45, who had had symptoms of renal calculi for about five years. At the time of the operation she was suffering from anuria, vomiting and great prostration. Operation was undertaken for the relief of the suppression of urine. "The right kidney was found full of malodorous pus with calculus formations weighing an ounce. The same condition was found on the other side. The woman recovered very well indeed from the immediate effects of the operation and lived for thirteen days. She eventually died, not from suppression of urine, but from asthenia." (*Lancet*, vol. 1, 1891, p. 145, and *Transactions of Clinical Society of London*, 1891, vol. 24, p. 157.)

In connection with the foregoing case Mr. Turner made the following statement, at a meeting of the Royal Medico-Chirurgical Society, viz.: that in the post-mortem records of St.

George's Hospital for twenty-one years past he had found mention of 43 cases of renal calculi, in only nine of which were both sides affected. I know of no other statistics on this subject (not having looked for them), but this fact, together with the fact that 160 cases of nephrolithotomy are now on record, in only four of which have both sides been operated upon, goes to show that double nephrolithotomy is an operation but rarely called for. An analysis of the five cases here referred to shows the net results to be three recoveries and two deaths. Of the former at least two have sinuses persisting. In one (Dr. Lang's case) the second operation does not seem to have been a very severe one. In another (Mr. Page's case) no stones were removed from either kidney by operation. (In the first the stones lay in a cyst outside the kidney, and in the second the stones were passed after recovery from the operation.) In this case it is not stated whether sinuses persisted or not. In the third case—the subject of this paper—the recovery seems to be so far very satisfactory, and to promise well for the future, as with the exception of a sinus which, I believe, for reasons already stated, has no direct connection with the kidney, and which I hope to be able to close by ordinary surgical measures, there is practically nothing to be desired in the patient's condition. The most interesting feature of this case is the suppression of urine which followed the second operation. Of the fatal cases the death from hæmorrhage (Mr. Godler's case) has, of course, no special bearing upon the double operation. In Mr. Turner's case, the only one in which both kidneys were operated upon at the same time, one may be pardoned for thinking (although the operator states distinctly that death was due to asthenia and not to suppression of urine) that if not due to suppression of urine, at least deficient urinary secretion was the main factor in causing death on the thirteenth day. This case, however, and others, notably the case reported by Mr. Clement Lucas (*Lancet*, vol. 1. 1891, p. 144), in which he performed nephrolithotomy on the sole remaining kidney three months after nephrectomy, and on the fifth day of complete anuria for the relief of the latter symptom, with the most satisfactory result, prove that the operation may be performed with safety in the most advanced stages of pyonephrosis, and under the most unfavorable circumstances. Brought face to face, for the first time, with such conditions as above described, the surgeon may well be pardoned for hesitating to advise operation—and yet he has no alternative. Fortunately, however, the records

of the double operation up to the present time offer a far more hopeful prognosis than one would be led by *a priori* reasoning to expect.

A CASE OF ADENOMA SEBACEUM.

BY

S. POLLITZER, A.M., M.D.,
New York.

J P., æt. 25, single, Austrian, waiter, was seen in January, 1891. The patient is a healthy, strong, well-built man of unusual intelligence for his class. His history presents nothing of interest. The affection for which he consulted me was noticed six or seven years before at the upper margin of the present patch, spread downward slowly, and has remained stationary for three years.

As the patient entered the room at the dispensary I was struck by what looked at first glance like a fresh linear hypertrophic scar on the left side of his forehead. The patch extended from just above the left frontal eminence somewhat obliquely downward and inward to a point about three-quarters of an inch above the eyebrow, being about one and a half inches long and on an average a quarter of an inch wide. On inspection it was found to be made up of about thirty obtusely conical and rounded papules, most of them about as large as a medium-size barley-corn. At the summit of nearly all of them a dilated sebaceous follicle was seen filled with a brownish plug of sebum which could be partly expressed by manipulation. The little nodules, though close together, did not appear to coalesce. Two small round yellowish cysts were to be seen in the patch, one of which on being incised discharged a little creamy sebaceous matter. The entire patch presented a diffuse bright red appearance; but no telangiectic vessels were to be seen. No subjective symptoms were present and the patient desired the removal of the patch only on account of the disfigurement which it produced. In figure 1, the distribution of the nodules may be seen.

A probable diagnosis of adenoma of the sebaceous glands was made, and a small piece, cut so as to include one of the cyst-like bodies and several of the nodules, was excised. The specimen was divided; one-half fixed in Flemming solution, the other in alcohol.

An examination of the sections verified the clinical diagnosis. Almost the entire specimen was found to be made up of sebaceous gland tissue which had preserved the lobular arrangement of the normal gland. The resemblance, both in the appearance of the cells and in their arrangement, to the normal sebaceous gland was so close that I suspected the affection might be simply a hypertrophy of the gland. An actual measurement of the individual cells showed, however, no increase in their average size over that of the cells of normal sebaceous glands from the same region, and there were, of course, far more than the usual number of lobules. The condition could be interpreted, therefore, only as one of adenoma. The cyst-like body was found to be a true sebaceous cyst, one of the proliferated lobules of the gland having undergone degeneration. The epidermis appeared normal, though the interpapillary rete seemed in places unusually prolonged downward, and the large openings of the pilo-sebaceous follicles, filled with thickened sebum, were very striking. In the corium there was a slight condensation of connective tissue around the lobules of the sebaceous glands.

There were no signs of dilated blood-vessels. In one portion in the upper region of the corium there was a considerable degree of round-cell infiltration. This may have been due to irritation following the attempts of the patient to squeeze out the sebaceous plugs; or it may have dependent on the stimulus derived from the proliferating adenomatous tissue; for it was just in this region that the new growth was seen in active process of development. In Fig. 2, two club-shaped processes of epithelium may be seen shooting out from the side of the root-sheath of a hair, exactly like the buds from which the glands as formed in the embryo. Near the end of one of them a small island of epithelial cells appears as if cut off from the growing shoot; such an isolated group of cells would, as they underwent their physiological fatty degeneration, necessarily give rise to a sebaceous cyst.

In some of the sections, peculiar epithelial structures suggesting the condition described by Török as syringo-cyst-adenoma were seen (Fig. 3). The structures appeared between the lobules of the sebaceous glands in the upper portion of the middle zone of the cutis, and consisted of round, oval or elliptical rings of one or two layers of flattened epithelium enclosing spaces which contained colloid matter or were empty. The appearance as a whole suggested that due to section of the glomerulus of the sweat gland, but this idea was negatived by the

fact that the sweat gland coils appeared far below the level at which these structures occurred and by the peculiar colloidal matter which they contained. I have no doubt that they represent a group of embryonically misplaced epithelial cells which have proliferated and undergone colloidal degeneration in the middle of each group.

The treatment of the case consisted in oblique-crossed scari-



FIG. 1.

ADENOMA SEBACEUM.

fication of the entire patch repeated three or four times at intervals of about a fortnight, and resulted in the production of a smooth, colorless, scarcely perceptible scar. I saw the patient six months later and there had been no recurrence.

There have been scarcely twenty cases of this rare disease hitherto observed, and this is the only case yet recorded in America. The noteworthy features in this case are: 1. The

peculiar distribution and arrangement of the new growth ; in most of the cases recorded, the distribution was symmetrical, though in one of Crocker's cases the lesions were strictly unilateral, and in Jamieson's case they were grouped chiefly on one side of the face. 2. The late appearance of the disease, in

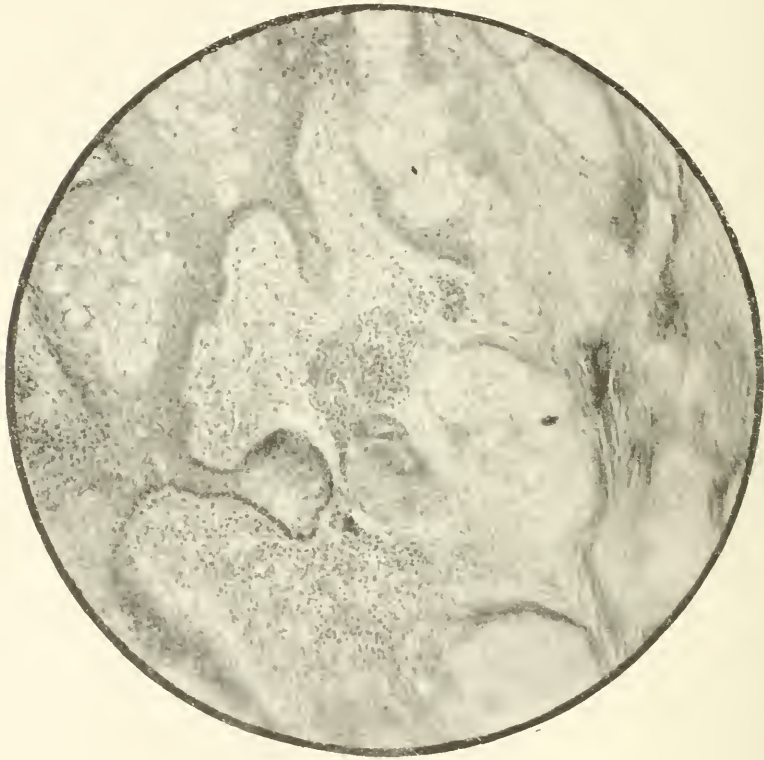


FIG. 2.

ADENOMA SEBACEUM.

Alcohol specimen ; showing club-shaped proliferations of Adenomatous Tissue.

the nineteenth year : in many of the cases the lesions were present at birth or developed soon after ; in Jamieson's case they appeared at puberty, and in Caspary's at seventeen years, mine being the oldest case yet observed. 3. The absence of telangiectases which formed a marked feature of some of the

cases. 4. The occurrence of cystic degeneration, which was noticed also in Vidal's case. 5. The occurrence of the peculiar epithelial structures which have undergone colloidal degeneration. Balzer describes numerous small cysts in the sweat glands in one of his cases; it seems not unlikely that the condition

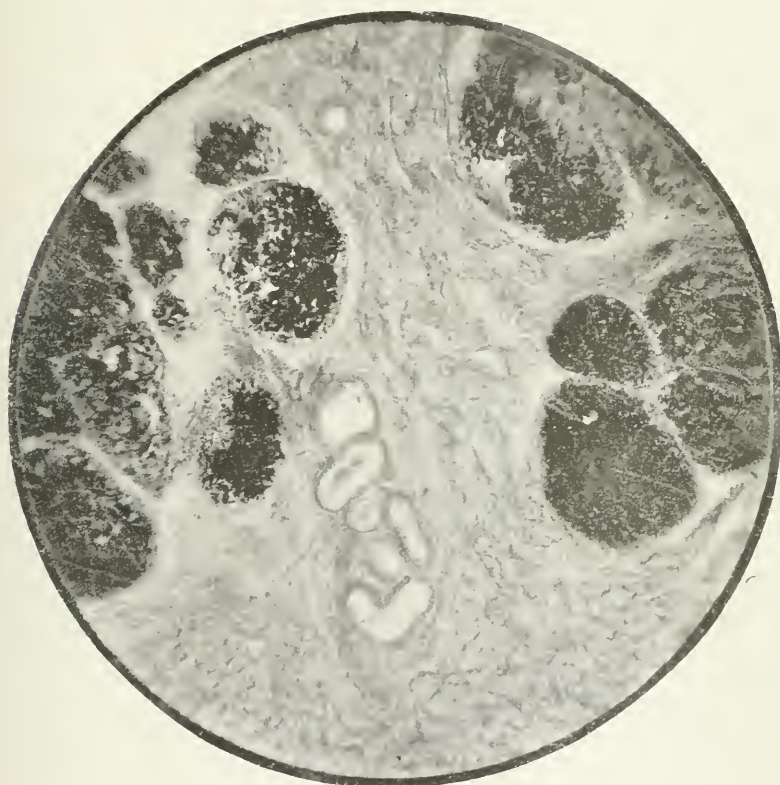


FIG. 3.

ADENOMA SEBACEUM.

"Flemming" specimen; showing lobules of sebaceous tissue stained black, and groups of epithelial cells, some of which enclose colloid matter.

was like that seen in my case. 6. The bud-like processes of the actively developing glands. 7. The favorable result of the treatment.

32 East Sixtieth Street.

ODD METHODS OF SYPHILITIC INOCULATION.¹

BY

WILLIAM JUDKINS, M.D.,

- Cincinnati, Ohio.

THE first week in December, 1892, Mr. B. called at my office with what he stated was a broken pimple in his scalp.

Examination revealed an abrasion with edges that might be termed sloping, though quite superficial; some thickening, with some redness of the adjacent tissue present. The patch, which could be covered with a three cent silver piece, was situated on a line with the occipital protuberance half way between that point and the ear. Left side a slight discharge was present.

The gentleman was a "high liver," widower, American by birth, journalist by occupation.

Inquiry brought out the fact that the day following the November election (he having celebrated that event quite extensively) he spent the major part of the time in a Turkish bath. Later in the day he visited, as he supposed, a first-class barber, where he had his hair cut with what is known as "clippers," a substitute for scissors, which has for its chief recommendation a saving in time.

He stated that he remembered the barber "jabbing" him at about the point of soreness, but, from his condition, gave it no special attention.

From the general appearance of the sore at this visit, and as I was loath to believe it was syphilitic—but subsequent events have proven such to be the case—a guarded prognosis was given.

At this point mention might be made of another case that came under my care, late in the attack, some nine years ago, who was inoculated through the hands of a barber with the papular eruption of the palms. The lesion in this case was located in the eyebrow. The case was under treatment some three years, and as twice that length of time has elapsed since his discharge, and no symptoms calling for treatment have been seen, or any indications of constitutional trouble in two

¹ Read at the 7th Annual Meeting, American Association of Genito-Urinary Surgeons, held at Harrogate, Tenn., June 20th and 21st, 1893.

children born in the last five years, I feel safe in pronouncing him cured.

The first case, that of the scalp, is progressing as well as this class of cases could be expected ; for a week or two he is quite religious in the attention he gives himself, when he will feel better, become negligent regarding his welfare, indulge his appetite and consequently relapse.

I report this case not so much from its novelty as to the mode of the introduction of the poison, but to add another case to the few on record going to prove the scalp as not proof against infection, as Ricord at one time held, but who acknowledged his error before his death, as well that we as sanitarians should warn our patients against the use of this villainous instrument that is daily brought into use.

To me the case was one of great interest, as for some time it has been my belief that harm could be done by the use of this "clipper."

Some five years ago, I was a witness to the fact of the same being used on a head and neck liberally dotted with the characteristic danger signals. No aseptic precautions were taken after use to prevent inoculating the next one coming under that barber's charge. Whether harm was done or not, I cannot say. Certain it is, that in the case reported, such a result was had. A syphilitic with the eruption of the scalp had had the clippers used, who was followed by a dissipated but non-syphilitic subject that through the carelessness of the barber became an easy victim.

In this connection it is interesting to note "That the Government of the Republic of Colombia has, in view of the possibility of contagious diseases, such as ringworm, favus, and syphilis, being transmitted by combs, brushes, etc , passed an enactment making it compulsory for all barbers and hairdressers to keep the instruments of their art clean, and to disinfect them every time they have been used.

A notice to this effect is to be posted up in all tonsorial establishments."—*Record*.

In proportion these diseases are no worse there than here. Why, then, can we not have the same law enacted here, thereby saving untold misery to the present and future generations? The "syphilis of innocents," as spoken of by Bulkley, will be much less frequent.

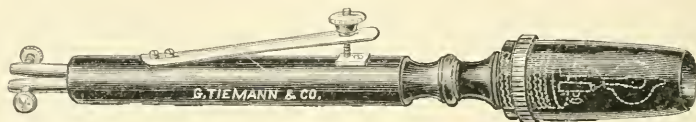
134 Garfield Place.

THE HYDROCELE DETECTOR.

BY

WILLIAM K. OTIS, M.D.

THIS little instrument has proved so useful in my practice and in the hands of some of my friends, who have used it during the past three years, that despite its simplicity I take pleasure in presenting it to the notice of the profession.



It consists of a round, hard-rubber handle five inches in length, at the distal end of which a "mignon" incandescent electric lamp, identical with those used in the electro-urethroscope, is placed. This lamp connects with the battery wires by connections passing through the handle and terminating in "binding posts" at its proximal end. The light is controlled by means of a spring "switch," which can be either pressed down by the thumb or fixed by means of a thumb-screw. A hard-rubber tube two inches in length and one inch in diameter is screwed to the top of the handle over the lamp, enclosing it and only allowing the escape of light at the open end.

When a suspected hydrocele is presented, the mouth of the tube is pressed firmly against the tumor on the side opposite to the operator and the lamp turned on, when the entire tumor, if fluid, will be rendered luminous. The light is very powerful and in most cases the testicle can be readily mapped out and definitely located. I have also found this apparatus exceedingly valuable in illuminating the bladder after suprapubic section and in making examinations of the mouth, nose, vagina and rectum. It is manufactured by Messrs. Tiemann & Co. at a comparatively small cost.

5 West 50th Street.

Society Transactions.

THE AMERICAN DERMATOLOGICAL ASSOCIATION.

SEVENTEENTH ANNUAL MEETING. HELD AT MILWAUKEE, WIS.,
SEPT. 5TH AND 6TH, 1893.

DR. GEORGE H. FOX, *President, in the Chair.*

(Concluded from page 466.)

Lupus Erythematosus as an Imitator of Various Forms of Dermatitis.¹—

DR. H. RADCLIFFE CROCKER of London, England, read a paper with this title.

DR. W. A. HARDAWAY—I do not know that I can add anything of interest to Dr. Crocker's paper. I endeavored to show in my paper that there are some forms of disease which imitate lupus erythematosus. They are simply lupus vulgaris and various forms of tuberculosis of the skin.

DR. JOSEPH ZEISLER—I have very little doubt that the diagnosis in all of these cases is absolutely correct. I shall not reiterate examples from my own experience at this time. I am quite sure Dr. Crocker is right in stating that often the recognition of lupus erythematosus is at first quite difficult. In one point I beg to differ from Dr. Crocker, namely, in the statement that lichen planus does not extend peripherally while clearing up in the center. I find this peripheral extension, the final formation of a distinct ring consisting of minute lichen papules quite characteristic of some cases of lichen planus, and I have seen it sufficiently often to consider it as almost common.

DR. HENRY W. STELWAGON—I regret I cannot say anything of especial interest with regard to this subject. In my own experience I rarely have seen a case out of the usual run of lupus erythematosus. Almost all of them, with few exceptions, have been typical. In one or two instances I have seen some resemblance to lupus vulgaris, so that at first sight it was rather difficult to distinguish between the two. I have seen striking resemblances to seborrhœic eczema, so much so that it was impossible to say when the case first came under observation whether it was a lupus erythematosus or seborrhœic eczema.

DR. E. B. BRONSON—I think that while all of us may have recognized the forms of disease presented in the paper, we never have classified them in our minds, and often may have been doubtful as to whether they can be included under the head of lupus erythematosus. The standard by which we go in forming a diagnosis of lupus erythematosus usually depends upon two facts or two occurrences in the disease, namely, a long-continued erythema, and a resulting atrophy of the skin. An erythema which lasts for a sufficiently long period of time the issue of which is atrophy is pretty sure to be a case of lupus erythematosus. That, I think, is illustrated in some of the first cases presented by Dr. Crocker in his paper. Yet it is possible that in many cases of real lupus erythematosus the process does not go on to the

¹ Will appear in the January, 1894, issue of this journal.

stage of atrophy. I have seen cases—I presume all of us have—of long persistent erythema occurring in the face, in the usual or typical sites of lupus erythematosus, and yet disappearing before atrophic changes supervened. If we regard lupus erythematosus as a neuropathic disease, I do not see why it is not possible for the greatest variety of changes to occur, nor is it strange that it should imitate a vast number of diseases.

There is one affection not alluded to which simulates lupus erythematosus, and that is syphilis. In one of the cases presented as lupus erythematosus nodulatus, which was compared to a lupus vulgaris, it seems to me we might inquire as to the possibility of syphilis. It has, to be sure, the characteristics of lupus in its chronicity, and in the small size of the papules. It seems to me that lupus rarely persists for a long time extending at the periphery without a recurrence of the disease in the center; on the other hand, it is rare for a syphiloderm to recur upon the ground which it has once occupied while steadily advancing. Nevertheless, I think that syphilis is another disease which lupus erythematosus may be said to imitate.

DR. JAMES NEVINS HYDE—I concur with the members of the Association in thanking Dr. Crocker for his exceedingly interesting and well-illustrated paper. I think he is particularly happy in gathering together, as no individual has gathered before to my recollection, in one group a number of disorders which some of us, at times, have suspected to be lupus erythematosus, and few have been bold enough to describe as such.

With reference to the case in which Dr. Crocker and a brother practitioner had some slight variation of opinion, I should believe Dr. Crocker was in the right, and for reasons which Dr. Zeisler has briefly touched upon. Lichen planus may clear in the center, and on careful examination with a glass miliary polygonal papules may be seen at the border. At times a figure forms resembling the letter "L," with a distinct angle at one point or another. In some cases the suggestion is in the line of resemblance toward eczema seborrhoicum, if we ever use such a term. One of my odd-looking patients was a healthy lad, eighteen years of age, weighing 160 pounds. He had lesions about the upper and lower lid, the orifice of each nostril, the mouth and the glans penis. These patches were typical of lupus erythematosus with adherent scales and in distinct plaques.

DR. H. RADCLIFFE CROCKER (closing the discussion)—I thank you for the manner in which you received my paper. The idea was to elicit some interesting cases, which I am quite sure exist, though you may not be able to recall them to mind at a moment's notice.

I am afraid I did not quite convey my meaning to Dr. Zeisler. I quite agree with him that there are cases of lichen planus with patches that clear in the center; and these may enlarge peripherally. My experience, at all events, is that they do not enlarge *en masse* at the periphery; they enlarge at the periphery by the formation of fresh papules just beyond, which then coalesce with the patch. But these raised, red, defined patches spread as a whole, and not by the aggregation of fresh papules. This point I strongly rely upon. But it is quite possible I am wrong in that particular.

Dr. Bronson rightly enough said that the case of lupus erythematosus nodulatus somewhat closely resembles syphilis. Two medical men treated the patient as such, and one in his zeal salivated her severely, but of course, as it is now it does not convey a notion of what it was at the commencement. The clear centers of these patches are really cicatrices from caustic

and mechanical treatment. As originally seen they were distinct nodules. Of course, this case has been under observation for several years, and there is no question that in this particular instance there is nothing specific. I am quite ready to admit that there are cases that resemble syphilis. The fact is syphilis imitates all kinds of dermatitides. In saying that lupus erythematosus resembles syphilis and causes trouble in diagnosing it, is only stating in a different way that lupus erythematosus and syphilis illustrate simple forms of dermatitis, and are, therefore, like each other sometimes.

I have also seen cases somewhat like seborrhœic eczema. The case in the Sydenham Society's Atlas, which Dr. Hyde alludes to, was unquestionably one of lupus vulgaris. I think the plate very closely resembles the case in a boy of ten or eleven, who, without any previous antecedent ill health, suddenly got between forty and fifty spots of lupus vulgaris over his face and limbs. I think there were only one or two on the trunk, but they were quite numerous about the limbs and face, and they seemed to be of an embolic nature. Hutchinson pointed out that in the majority of cases where lupus vulgaris is multiple all the lesions appear at once. That was certainly true in this particular case, though it is not true in all cases. I have seen multiple lesions of lupus vulgaris developing over a period of many years.

The Treatment of Pruritus.—Dr. E. B. BRONSON, of New York, read a paper on this subject :

The chief underlying condition in pruritus is hyperæsthesia, whether in its common significance of an excessive irritability of the sensory nerves, or in the sense of an excess or engorgement of sensation. The prime indications, then, are to allay irritability and to divert or annul the excess of nervous excitement. Measures to remove local excitants, include, first of all, such as directly tend to prevent scratching. To admonish the patient to refrain from this is usually of little avail. Restraint may be possible during waking hours, but at night, when the trouble is always at its worst, and especially during the state of somnolence midway between sleeping and waking, no power can prevent it. It can only be avoided by first mitigating the lesion through the aid of antipruritics. Sedatives when used internally are apt to be disappointing. The degree of general sedation that is required to affect the nerves of the skin in so intense a disturbance as pruritus often is, affords a sufficient reason why this method of treatment is usually objectionable. Further than this, the depressing and atonic after-effect on the nervous system tends to exaggerate the general hyperæsthesia which is already essentially an atonic condition, and thereby increases the tendency to itching. Especially objectionable are most of the narcotics. The bromides, on the other hand, are often indispensable, and may be required in liberal doses. It is important to avoid the enervating effects of loss of sleep, and for this purpose sulphonal or some other hypnotic is occasionally needed. In connection with this, two internal remedies, which have been especially recommended by Bulkley, are worthy of mention, and they are *cannabis indica* and *gelsemium*. The former is known to be a cutaneous anæsthetic as well as an analgesic, and by virtue of the former quality should be useful in pruritus.

Carbolic acid is the most reliable and most generally useful antipruritic which dermatologists possess. It was well named by Unna "the opium of the skin."

The following "antipuritic oil" has been much employed by the author for years, both in a local and so-called universal form of the disease, with no more untoward results than now and then a trifling dermatitis, when through oversight the patient has been allowed to make the applications too frequently, or has continued them too long. The formula is :

℞ Carbolic acid..... ʒ i. ij.
 Liquor potass..... ʒ j.
 Ol. lini..... ʒ j.

Sig. : Shake before using.

To correct the disagreeable odor of the linseed oil a drop or two of the oil of bergamot may be added. Salicylic acid and salol, though less energetic in their effects, act similarly to the carbolic acid. Thymol is also an admirable antipruritic, but on account of its irritating effect cannot be used when the skin is sensitive.

The author then dwelt on sensory stimulants, substitutive irritants, alteratives of cutaneous nutrition, and motor depressants. In pruritus hiemalis an all-important measure of treatment is protection against cold. The sole cause of Winter pruritus, aside from a special predisposing hyperæsthesia, is lowered temperature.

DR. JAMES NEVINS HYDE—We are all glad to agree with the author of this paper on the treatment of pruritus. With reference to its local treatment by pastes, ointments, lotions, etc., containing cocaine, I shall not use them any more. I have had three cases of the cocaine habit develop in consequence of treatment with that drug.

There are two methods of local treatment which were not referred to. One is the exclusion of air. Some of the articles used locally for the relief of pruritus, operate by excluding air from the surface. Some of the pastes in use, not medicated, made with gelatine and similar articles for painting the skin, operate by exclusion of air. Another interesting method of relieving pruritus, where it is circumscribed and strictly limited to one side of the body, is by treating the other and corresponding side of the body with substitutive stimulants. A patient of mine had one lower limb affected with a pruritus which had been intolerable, lasting for long periods of time ; but by stimulating the other corresponding side of the body the patient was relieved. This is an old experiment, such as, for example, the treating of one side of the body for psoriasis with one article, and the other side with another. One side of the body must be improved *pari passu* with the other.

With reference to pruritus hiemalis, I may have misconstrued what the doctor said in his paper, but it does seem to me it is not so much a continuous cold as it is the rapid change from a high to a low temperature which produces the most marked results, because in a severe climate many of these cases occur in the early part of the Autumn. If we have a Winter with cold weather for a long time, the pruritus may disappear and come on in the Spring.

As to pruritus of the ano-genital region, there are hardly any cases that appeal to our sympathies more than obstinate forms of this disease. As I grow older, I trust less and less to local treatment in these cases. We can put our finger upon the cause of these diseases, if we search with care. There are two points of interest. I would place as the first of the causes in

the list, gout. Where there is no special local trouble to guide us to the end the dietary will be often effective. Second in importance and frequency is diabetes. Examination of the urine will often indicate what the cause of the trouble is. Then comes a long list of other troubles, such as tuberculosis of the prostate gland and testicle, venereal troubles, etc. I think we may say gout stands at the head of the list in adults with pruritus of this region, and diabetes and other affections of the rest.

DR. H. RADCLIFFE CROCKER—I think we are indebted to Dr. Bronson for trying to put on a rational foundation the treatment of a condition that has long been empirically treated. The paper has greatly interested me, and it is really one of the first attempts to make our treatment rational, which should always be our aim.

There is one point that I desire particularly to allude to, and that is the effect of counter-irritation over some of the vaso-motor centres, especially in the local form of itching. I had a case of a woman who had itching down the sciatic nerve, which was persistent for some months, and which was relieved by a mustard leaf over the hip. Some cases of persistent, agonizing pruritus of the scrotum may be markedly relieved by counter-irritation over the lumbar region. I simply mention this as one other method of giving relief in very obstinate cases of pruritus.

DR. W. T. CORLETT—I will refer only to that troublesome form of pruritus known as prurigo hiemalis. For many years I have had a wide experience with it, prevalent as it is along the southern shore of Lake Erie. Especially instructive has been the affection as observed in two medical men, whose cases I had the pleasure of reporting to this Association some years ago. It may be remembered that they had traveled quite extensively, and had made observations as to various climatic influences on the disease. There is one feature I wish to call attention to as I think it gives a clue to its further etiology; it is the dry, roughened condition of the skin which precedes the yearly onset of the itching. This condition continues until warmth stimulates the glandular activity of the skin. In treating this form of pruritus I have employed both internal and external measures. Internally, ichthyol is the only drug that has given encouragement to its further use, but, as external measures were employed at the same time, I am at present unable to say how much credit the drug deserves. Local treatment I consider, with the present state of our knowledge, to be of the most importance. First I endeavor to lend to the skin that suppleness that pertains to its healthful condition, by the use of lanolin, which is applied after a bath, or more frequently if desired. Incorporated, or previously applied in aqueous solution, resorcin has been the most efficient drug that I have used. The strength employed is three to five per cent. Another property resorcin has in aqueous solution is to leave a delicate film upon the skin after the water has evaporated. This meets the indication mentioned by Dr. Hyde, that of protecting the surface from the air.

DR. PRINCE A. MORROW—Dr. Bronson has gone over the subject so exhaustively that there remains little to be said in regard to constitutional treatment and the use of certain drugs that he has referred to, more especially gelsemium. I have never found the same advantage claimed by the originator of this method of treatment that Dr. Bronson seems to have done. I think, in the first place, gelsemium is a drug that is too dangerous for use in doses which are sufficient to benumb cutaneous sensibility. I

had occasion to experiment with it somewhat upon myself years ago, when I used it for neuralgia, and I found that in taking doses of sufficient size to perfectly relax the muscular system, the sensation of pain was not materially relieved. I never discovered it had any effect whatever upon the cutaneous sensibility, and I have tried it in other cases of pruritus and have been rather disappointed in its antipruritic effect.

I may mention that I have found the use of the hot-water bag applied to the spine a very excellent remedy in cases of regional pruritus, notably in cases of the persistent and very severe pruritus that sometimes follows zoster, especially in elderly persons. I think the application of the hot-water bag to the spine will relieve this localized pruritus more effectually and more promptly than any other course of treatment that I have used. According to my observations, substitutive irritation can be applied very effectively in cases of genito-anal eczema. My attention was first directed to this plan of treatment ten or fifteen years ago by a patient I was treating for eczema of the anus, with very unsatisfactory results. He passed from under my observation for awhile, but some weeks later presented himself again to report progress. Upon stripping him for the purpose of examination, I found that he had a number of irritative plasters on the legs at different points, and also there were quite a number of pigmented patches which marked the place of the former plasters, but his anal eczema was entirely relieved. It was with a sort of triumphant feeling to boast of the superiority of the treatment over mine after he came back to report. I have resorted to that method in one or two cases which were very obstinate, with good results.

Among the local remedies I have found most efficient is a combination of two agents Dr. Bronson has spoken of, namely, carbolic acid and camphor. We can use sometimes two drachms of camphor and one or two drachms of carbolic acid to the ounce of zinc oxide ointment. Ordinarily, I find the combination of a drachm each of carbolic acid and camphor and the proper proportion of zinc ointment quite sufficient. Another remedy I have found very efficacious is salicylic acid, made up with wax and spermaceti in the form of an ice, or in solution with rose water and glycerine. To most of my patients who have pruritus of the scrotum or anus I recommend this preparation. By rubbing it on the parts affected it gives them almost immediate relief which lasts for several hours. Of course, every practitioner has special remedies and special combinations of remedies, which he has found in his experience to act better than other remedies. I think our treatment, notwithstanding Dr. Bronson's very scientific classification, must always be essentially empirical in the management of pruritus.

DR. R. B. MORISON—I have only a few words to say, as the ground has been so well covered both by the essayist and the preceding speakers. Two of the worst cases of pruritus I have ever had followed the use of water, whether hot or cold. They were the cases of two gentlemen who were over seventy years of age, but every time they bathed, and they were extremely fond of it, they came out of the bath-tub and suffered intensely, so much so that they were treated every time they went into the water. One of them has since died, the diagnosis being contracted kidney. The other is still alive. The only way to do was to use some application that was soothing, such as a lanolin preparation. If they did not do that when they came out of the bath-tub they suffered all night, even if they bathed early in

the day. These cases show that water does not always stop itching, which we suppose it usually does.

In regard to pruritus ani, of course every one treats it by some method of his own. Some of the worst cases I have had I have relieved by a strong application of acetic acid. I believe, with Dr. Hyde, that a great many of these cases are due to some constitutional trouble. Several of the cases under my charge have a tubercular diathesis.

I am not surprised in regard to the use of salicylic acid in pruritus, as it is one of the best things I have used to alleviate itching, especially if used in the form of a lotion. When put in solution with biborate of soda in sufficient quantity it can then be applied with cloths. It relieves itching of the scrotum and anus, and is an admirable preparation for this purpose.

DR. W. A. HARDAWAY—The first thing to do in all cases is to seek out the cause and remove it; but we are often forced to resort to prescribe empirical remedies. There are three remedies that I sometimes successfully employ not mentioned by the reader. Quinine in ten or fifteen grain doses at night often acts well; perhaps these cases are malarial in origin. Wine of antimony, given several times daily, is useful. Pilocarpin by the mouth or hypodermatically, especially where the skin is harsh and dry, is occasionally valuable. Hypnotic suggestion may be tried in desperate cases. This fact I have proved. Byron Bramwell has recently reported a number of cases of skin disease where this extra-medical measure has been successful.

Locally, carbolic acid stands at the head of the antipruritics. I think it acts better when sprayed on with an atomizer. Menthol is a valuable remedy but I have got better results from it when combined with lanolin or oil than in solution.

DR. L. N. DENSLOW—I did not intend to mention ergot as a remedy for relieving pruritus, as I am conducting some experiments with it present. Accidentally I found that in giving ergot in cases of acne in the female that it relieved the intense itching due to pruritus. After that I tried it in cases of eczema where there was a great deal of hyperæmia with apparent success. I have used it probably in eight or ten cases. I mention this so that some of you who will have the opportunity may try it and report your experiences next year. I believe that in the eight or ten cases in which I used it a great deal of benefit resulted. No application was used during the time the ergot was being given.

DR. E. B. BRONSON—The paper I have read is but a part of something that has gone before. The particulars presented in my paper to-day serve as corollaries to what was advanced in the previous part of my articles for Morrow's system. There is much of it that is elementary. It was not my intention to give any new methods of treatment, but rather the rationale of such methods as have shown themselves efficacious. It was an attempt to systematize a subject which has not been systematized before.

With regard to what Dr. Hyde has said with reference to the exclusion of air, his remarks agree perfectly with what I have said. In very few cases of severe pruritus will ointments be tolerated. Patients will tolerate an ointment for a short time only. In order to be retained it should be combined with some antipruritic for, as a rule, it will be scratched or rubbed off, unless in the form of some fixed dressing.

With regard to a sudden change being the cause of pruritus hiemalis,

that is precisely what I have maintained, more particularly in connection with the etiology, and I agree with Dr. Hyde that it is not the cold so much as the sudden cold that hits the hyperæsthetic tendency. The affection will disappear in a twinkling on a warm day and recur again as soon as the weather becomes cold. The only way is to protect the part from these changes, and several methods have been suggested.

With regard to Dr. Corlett's plan of using resorcin, I shall be pleased to try it. I imagine the rationale of that treatment is not exactly what he has represented. I should rather attribute it to the action on the blood vessels. There is apt to be hyperæmia in connection with pruritus, and the resorcin, besides having some anti-pruritic effect, is especially efficacious, I believe, in reducing hyperæmia. I agree with Dr. Hyde with regard to the importance of gout in connection with pruritus. My paper dealt only accidentally with the etiology, but I regard gout or rheumatism as much more apt to be the cause of localized pruritus than any local trouble that may be there. Pruritus ani is more apt to be due to arthritism than to any reflex irritation communicated from some other region. It is the same way with pruritus vulvæ.

I am very much interested in what Dr. Hardaway has said with regard to the use of quinine. It is an interesting subject to study, but I should regard the influence of quinine in this disease as due chiefly to its action on the nerve-centres. Pruritus is a form of hyperæsthesia in which the equilibrium of the nervous forces is disturbed. The force accumulates in one part and is abstracted from another. The use of quinine restores the normal equilibrium by acting as a stimulant upon the nerve-centres.

In regard to the use of the atomizer, I am disposed to believe that the superiority of this method is due to its tendency to produce cold. I do not believe the action of the carbolic acid is any more effective when used in this way, but I should think the major part of the effect was due to the abstraction of warmth.

Angiokeratoma ¹—This paper was read by DR. JOSEPH ZEISLER, of Chicago.

DR. W. A. HARDAWAY—Some years ago, before this disease had been described, I remember to have treated by electrolysis a case of vascular warty growths situated on the radial flexor side of the wrist; and very recently I have met with another case of the same nature. The destruction was effectual, but required several sittings.

DR. W. T. CORLETT—I have been very much interested in listening to the paper of Dr. Zeisler. It my belief, however, that the disease is not so rare as the few cases reported might lead us to suppose. This arises from the difficulty in making a diagnosis, many cases being classed with other affections. I remember distinctly two cases of warty growths, corresponding to the photographs Dr. Zeisler has shown, that have come under my observation, which also correspond to the lupus verrucosus of the French writers, and as such they were recorded. One of these cases, in which one hand alone was affected, was seen during the past year; the lesions were destroyed with the acid nitrate of mercury. In this case the vascular element was not prominent. One other case I recall, in which the warty growths were situated on the legs, presenting a picture not unlike the one Dr. Zeisler has

¹ Will be published.

passed around. The eruption was composed of warty growths, very itchy and dark at the base, which I attributed to the varicose veins, which were also present. These latter, however, disappeared in the course of two years without any mechanical treatment, although the warty growths and dark color of the papules still remain.

Personally, I thank Dr. Zeisler for the admirable paper he has presented, and for calling our attention to this special subject.

DR. JAMES NEVINS HYDE—Like the preceding speakers, I was very much interested in listening to the details of the case of angiokeratoma reported by Dr. Zeisler.

With reference to the diagnosis I think that syphilis can be excluded without difficulty, as the essayist has been cautious about that. The only point where there might possibly be suspicion is suggested by him that the patient may have had granuloma fungoides. There is not the slightest suggestion of granuloma fungoides in the history of the case.

DR. H. RADCLIFFE CROCKER—We are indebted to Dr. Zeisler for bringing this subject, which is still regarded as a rare affection, before the Association for discussion.

With regard to granuloma fungoides it does not seem to me to have much in its favor, as there is nearly always antecedent dermatitis of more or less duration before any tumors commence. I should not consider that this disease requires discussion at all.

There is no doubt that it is a rare affection. I saw one case in private practice, and another in hospital work, but I have not had an opportunity of investigating them thoroughly. There have not been many cases shown in London. I would like to add an historical note to this disease. Cottle was the first to record a case of it. Last year I came across a volume of St. George's Hospital Reports for 1877, in which I found a colored plate of this affection.

I did not hear Dr. Zeisler refer in his histological and microscopical description to the state of the lymphatic vessels or spaces. A good deal of stress is, I believe, laid upon their condition by Mibelli and other observers.

DR. ZEISLER—I did not find that condition.

DR. SHERWELL—I have no objection in particular to the term angiokeratoma being used to designate this peculiar affection of the hands, feet, etc., but do also believe that a condition not much differing from it pathologically is to be found in other conditions, as, for example, in old eczemas of the lower leg in old and rheumatic people, etc. I think the condition (anatomico-pathological) would in these cases be found very similar. As to etiology, of course, I do not know.

DR. ZEISLER (closing the discussion)—I have only a few words to say in closing. Looking back to past experiences all must realize that here and there we have made a wrong diagnosis; but we often rectify our mistake afterwards as we meet a vivid reproduction or read a classical description of a similar case. Angiokeratoma, however, surely is a rare disease, and I do not recollect of ever in my life having seen anything like the case described, here or abroad. If I have, perhaps, seen one or another case of the ordinary form, I overlooked it. The two cases mentioned in my paper occurred to me during the last year. The case which Dr. Corlett mentioned does not seem to compare with keratoma.

I am very sorry that the gentleman from New York who made the diag-

nosis of granuloma fungoides is not with us. He might have explained the reason for his diagnosis.

As regards Dr. Sherwell's question, I consider it very difficult to make a close differentiation between lymph and venous spaces. I do not, at least, feel competent to make this distinction. But the cavernous spaces were present, as you can all see very easily.

A Contribution to the Pathology of Acne Varioliformis (Hebra).¹—DR. FORDYCE, of New York, read a paper with this title.

DR. JOSEPH ZEISLER—The Association is to be congratulated upon having such an excellent contribution to the pathology of this disease. I am sure we need such work as Dr. Fordyce has given us in order to be recognized abroad as regards doing scientific and not too much empirical work. I should have been glad to receive from Dr. Fordyce a more distinct impression as regards the etiology, which has not been elucidated in the paper, while the pathology has received full recognition. I have seen but half a dozen cases of the disease in the last few years, and I have found no distinct etiological factor in them. There has been no disturbance of the general health, nor could I discover any neurotic condition; so that I am very much inclined, with Dr. Fordyce, to look upon this disease as due to a peculiar sort of infection. Some of the cases I have seen extended up to the scalp, but none affected the back; the nose and the beard, however, were involved in a few of them.

DR. H. RADCLIFFE CROCKER—To make out definitely that the disease is situated about the hair follicles, as has been done by the author of the paper, is a point that has not been clearly established before. With regard to the distribution of the disease there is no doubt that our ideas are constantly enlarging on that point. I have seen it upon the trunk and chest especially several times. A short time ago I had a case presenting all the typical characteristics of the disease elsewhere, in which the scrotum was affected; but, owing to the moisture of the part, if it had not been for the lesions of the rest of the body it would have been impossible to recognize that it was of the same nature. It appears to me the first thing that happens is the formation of a little horny peg at the orifice of the follicle, and that inflammation follows secondary to that little horny peg. Take the earliest papules that you can see with the naked eye and you will find a little horny point in the center. It seems to me that this is the irritating factor which leads to the inflammation. Of course, what produced the formation of the horny peg I am unable to say. Our knowledge concerning the etiology of the affection is not very clear. If we take a number of cases and examine their histories we shall find that a considerable number of them have a syphilitic history and that syphilis may be a predisposing factor, but there can be no question that the disease itself is not syphilitic. Many cases will get entirely well. I have seen a great many cured by perchloride of iron, and other cases are materially benefited by iodide of potassium. In all cases assistance is derived from local antiseptic treatment, mercurial ointments especially. I would like to have Dr. Fordyce tell us whether his observations showed the central horny peg.

DR. JAMES NEVINS HYDE—I shall not discuss the able and interesting

¹ Will be published.

paper of Dr. Fordyce, as I was, unfortunately, called away and did not hear it.

With reference to the ulerythema of Unna, which was mentioned by the essayist, my impression is that in making a differential diagnosis Unna says he did not seek for a parasite, but that such might lie at the foundation of the trouble. In a series of disorders in which the clinical aspects are similar, and in which tubercle bacilli have been recognized, I believe we shall eventually include this particular disease in the category described in our discussion yesterday under the title of the tuberculoses. There is a sycoform group of tuberculoses. "Non-parasitic" sycoform may rarely exhibit the clinical symptoms of the same disorder. In a year or two there comes a remarkable change in the lesions of the face. The skin is often scarred and these scars are indelible. The other disorders belong to the same group. I believe eventually this special disorder will be recognized as one of the forms of tuberculosis of the skin.

DR. E. B. BRONSON—I am glad to be corrected in the diagnosis I made with reference to the case reported two years ago. I have no question as to the correctness of the conclusion to which Dr. Fordyce has arrived. I am very glad he supports me, however, in the opinion of its clinical resemblance to *acne varioliformis*. There were certain features about the case which differed from those of the latter disease as we see it in the face or scalp. Perhaps it had a little more of an inflammatory character about it. There was considerable papulation; in some cases there was suppuration. I shall be interested to know whether some of the cases described by Boeck and others as *acne necrotica* were of the same nature as our case or were true cases of *acne varioliformis*.

With regard to the clinical features of *acne varioliformis* I have noticed frequently a scale, but am uncertain whether it is what Dr. Crocker refers to or not. In some cases I have been able to trace the inception of the disease to a papule. I think there can be no question that at a certain period there is a papule. One generally sees the disease in the advanced stage when it is difficult to tell what particular phase in the progress of the affection is represented by any particular lesion. I believe a papule is the first lesion of the disease, which is rather more superficial than the papules in this case described as *hydradenitis*. There is certainly very shortly after the appearance of the papule a scale which seems to be a little depressed.

DR. FORDYCE (closing the discussion)—In regard to Dr. Crocker's question, none of the papules removed by me were at a sufficiently early stage to show exactly what relationship the horny peg had to the subsequent process; but I should imagine that a papule might readily begin in the way mentioned, because the inflammatory process starts in the upper or middle layers of the hair follicle. If micro-organisms penetrate the hair follicle the inflammation would be excited outside of the hair follicle. I have not noticed clinically that appearance that he speaks of in the beginning of the papules.

In reply to Dr. Bronson he stated that Dubreuilh, who has gone over the subject elaborately, considers one of the cases of Pick as *hydradenitis*, but Boeck's case he is not disposed to class as a distinct disease. I would scarcely agree with him, however, as the case described by Boeck is probably one of *acne varioliformis* Hebræ. It appeared first on the forehead, and a microscopical examination, though made late in the lesion, showed that

it began about the hair follicles and had nothing to do with the sweat glands.

General Discussion on Pityriasis Rosea.

DR. HENRY W. STELWAGON—I presume we are to follow the same plan as we adopted last year and answer these questions categorically, going over them as stated on the programme.

In regard to the etiology, so far as my own knowledge goes I may be said to be completely in the dark. My impression is, however, that it will not be long before the true parasite is found for this disease. The general health, digestion and systemic conditions have apparently nothing whatever to do with this eruption. I believe it has no relation whatever to ringworm or seborrhœa. I think it is a disease *sui generis*.

So far as the symptomatology is concerned the lesions are usually slightly scaly, some markedly so. In almost all cases there is a characteristic salmon tint to the eruption. The eruption bears a close resemblance to a mildly developed papulo-squamous syphilide.

As to the treatment, I know of none that will materially shorten the disease. Sulphur, as an ointment or in baths, I have usually prescribed for it, and in some cases seemingly with benefit.

DR. JOSEPH ZEISLER—I have for very many years been in doubt whether such a disease as pityriasis rosea really exists. As Dr. Stelwagon has stated, the Vienna school does not seem to recognize it. There they look upon cases of pityriasis rosea as instances of herpes tonsurans maculosus, as we call it. This same idea I have held until about eight years ago when I had a very good opportunity to observe one case closely. This opportunity developed on myself, for I was the subject of typical pityriasis rosea and my colleague, Dr. Hyde, at that time confirmed the diagnosis. I then looked up the description and literature of the disease, and I have not the slightest doubt that his diagnosis was correct. For a time I was in doubt whether I was affected by ringworm or seborrhœa or even psoriasis. There were many rosy rings of the characteristic salmon color, particularly on my chest and abdomen and some on the arms. Within two weeks after this my wife developed the same disease. The rings showed on her arms and chest, but the case was not as pronounced as on myself. Since that time I have only seen one case in which I felt sufficiently warranted in making a diagnosis of pityriasis rosy and I would like to use this occasion to warn against making that diagnosis too hastily, for I am inclined to consider it a much rarer disease than would appear from our statistics.

As regards the etiology, I could not ascertain in my case anything of importance. I was in perfect health; I did not change my mode of living in any way; I was aware of nothing to account for it.

As far as the treatment is concerned, I experimented upon myself and studied the disease. I did not treat it at all, using no medicine internally and no external applications. I found the eruption to disappear gradually, until at the end of eight weeks it was hardly noticeable. In my own case there was only very little desquamation in the center. A microscopical examination of the upper epidermis which I scraped off for the purpose revealed nothing characteristic.

DR. H. RADCLIFF CROCKER—If I were compelled to answer these questions with the utmost brevity with regard to the etiology, I should say

we do not know; as to its relation to ringworm, eczema and seborrhœa there is none. With regard to its treatment, it does not require any. Although we may not know certain things we are allowed to conjecture, and we have certain data upon which we may form some conjectures. There is a point Brocq made some time ago, which was that in a large number of cases he could make out a primary plaque. Since he drew attention to that I have been able to verify his statement in a large number of cases. There is a single or perhaps two patches which may remain unchanged for a week or ten days, and then they begin to generalize. The generalization may be complete and cover the whole body, or it may stop short at any one point. The lesions at first are very often minute papules, then they enlarge peripherally and form oval or round discs. Some of these discs remain uniform and form pityriasis maculata. Some clear in the center, then you have pityriasis circinata. I have seen more cases than one in the same family, but the cases of Dr. Zeisler and his wife are particularly interesting as showing possible contagion in a number of instances. No doubt a micro-organism is the cause of the disease, and we know that Vidal described a minute microsporon, but as the same micrococcus has been found in other diseases, we cannot identify the true pathogenic organism at present.

I should say on the whole that the majority of cases run a shorter course than the preceding speakers have held. Many cases get well spontaneously in three or four weeks. I have known others to go on four or five months without treatment. With regard to confusing it with seborrhœa corporis, I do not know of any English writer who considers the disease identical with seborrhœa. With reference to its being like ringworm, I think the Vienna schools are mistaken on that point. We cannot expect even a great man like Hebra to be always right. I regard pityriasis rosea as an affection *sui generis*, connected with some micrococcus of which we have not yet identified the species. Internal treatment has no effect upon it. I have sometimes hastened its departure by the use of antiseptics, sponged over the body which relieves the slight pruritus which is present in some cases. An alkaline or weak sulphur bath is also beneficial. As Dr. Zeisler has said, the majority of cases tend to spontaneous recovery, although some run on for a long time.

DR. S. SHERWELL had seen many cases; did not consider it a rare disease, in the severest sense of the term, at least.

He had not been in the habit of considering it contagious in any sense, none of his histories leaning in any way to render it probable; almost, if not all his cases had been in married people as far as he could then remember, and was confined to the one individual. In view of some of the histories given by members, it seemed of course possible, though even now he would be inclined more to think of them as coincidental.

In one case it had occurred twice in successive pregnancies at about the same time in each. His patients, for the most part, had been florid, well-nourished people, and he did, as a matter of fact, usually put them on moderate alkaline and antirheumatic treatment, and used salicylic acid and resorcin applications with a little menthol, with at least some effect, as he thought.

DR. E. B. BRONSON—I have for some time thought that this disease was parasitic, and in one case which I was called upon to treat the patient had previously suffered from pityriasis versicolor, and pretty severely, it looking

very much as though the exacerbation was a generalization of the pityriasis versicolor. Patches grew abundantly all over the body, and were rose-colored. I could not distinguish it at first from a typical case of pityriasis rosea. This case disappeared promptly under antiseptic measures. I used bichloride of mercury in solution of two grains to the ounce. In other cases I have obtained apparently excellent results from the same application. On the other hand, I have seen other cases absolutely refractory to treatment. One case Dr. Fordyce remembers, and perhaps he will give us some light on it. A patient, addicted to the opium habit, was admitted to the Charity Hospital a year ago, and shortly after admission she developed a rose-colored, disseminated rash distributed generally over the body and extremities also. It was more abundant on the upper part of the body, and looked like an erythematous syphiloderm. That diagnosis had been made. It lasted for months without any perceptible change. There was slight papulation. The eruption was more pronounced at some times than at others, and at one time it disappeared entirely. I regarded that case as one of pityriasis rosea. I could exclude the possibility of its being syphilis, because of the long period of time it lasted, and the absence of other symptoms. It was absolutely unaffected by treatment. In that case the circumstances would point to a neuropathic character as a result of the opium habit.

DR. JAMES NEVINS HYDE—We have recorded in the last 18 months 87 cases of pityriasis rosea, and I am sorry not to agree with some of my colleagues with reference to the frequency of this disease. Dr. Zeisler had in his own person a superb illustration of the eruption in a typical form, and his case, together with that of his wife, would seem to point to the contagiousness of the disease. We are open to conviction on this point. But I have never seen two cases of the disease occurring in one family. The important point is the diagnosis. A relation to ringworm, it has none; to seborrhœa, eczema and syphilis, it has no relation whatever. It is liable to be mistaken for certain forms of psoriasis, erythema, and of dermatitis produced by drugs. I called attention to the importance of making an exact diagnosis when this subject was first presented to the Association. An important point is the salmon tint which is observed. Another point, and an interesting one, is, if carefully examined, the lesions are seen to be not strictly oval or circular. Upon the chest these are usually perfectly defined, and are roughly to be compared in outline to the upper shell of the crab, the long axis at right angles to the vertical axis of the body with a yellowish or salmon tint.

As regards its duration, I believe this to be shorter than that mentioned by some of the preceding speakers. The cases may run for two or three months, but the average duration is from six to eight weeks, after which involution is complete.

As far as the etiology of the disease is concerned, I know very little about it. We are still in doubt as to its parasitic nature, at the same time there are many features of the disease which suggest that it is not produced by a parasite. It seems to have a cycle, pursued until it terminates spontaneously. How many of the simple parasitic disorders terminate spontaneously? This disease has a natural process of evolution and involution. Treatment by means of a bran bath, or dusting the surface of the skin with boric acid or starch is all that is required. In some cases nothing whatever is done for it.

A word or two and I have done. These patients belong to one category, the delicate and slender school girls and young adults, varying in age from 14 to 21, both sexes. In many cases they are somewhat anæmic in consequence of overwork or chill. There is sometimes a rise of temperature. Some patients are in bed under the supposition that they have a terrible skin disease. But while many patients are young and of a delicate constitution, not long ago a patient was exhibited in my clinic with typical patches of pityriasis rosea abundantly displayed over the chest and shoulders and abdomen; he was a handsome, vigorous fellow of mature years, with powerful muscles and able to do a good day's work, who belonged to the dispensary class.

DR. FORDYCE—I observed some cases several years ago which support the view held by Dr. Zeisler. I treated a husband and then his wife, and in the same town from which they came a number of other cases were said to exist, which is evidence in favor of the contagiousness of the disease. I have examined the scales of two or three cases for micro-organisms, but I have not been able to discover anything definite in regard to its etiology. There are some forms of seborrhœal eczema which closely resemble pityriasis rosea. You will find in these, however, larger patches on the chest or back from which the smaller patches seem to originate.

Discussion on, What do we understand by Pemphigus?

DR. JAMES NEVINS HYDE—I feel incompetent to open the discussion on a subject which has occupied so much of the attention of scientific men. I shall only attempt in a cursory way to answer the question, what *do* we understand by pemphigus? What *should* we understand by pemphigus? Should we understand by pemphigus what we do understand by it? These are questions that suggest themselves to me. If I were to answer the question, What do we understand by pemphigus? I should say, that if we were to take all the articles in our treatises and the journal articles written by eminent men on this subject, that would explain what we understand by pemphigus. The question, What should we understand by pemphigus? is the most interesting question to consider. Should we consider by the word pemphigus what we actually do consider by it? The word pemphigus is used in a large and general sense, so that it practically means nothing for us. Every name in dermatology, like that of a nation, has to have its history. First it means something, and everybody who sees it thinks he knows what it means. We think at first we mean a disease when we use such a name, but after awhile somebody writes on this point and somebody on that, and further along doubt surrounds the term. The word pemphigus originally referred to a group of diseases or one disorder, the characteristics of which were the appearance on the surface of the skin of irregularly scattered or grouped and variously sized blebs developing in a cycle. We will not consider the etiology of these blebs or bullæ. We understand to-day by pemphigus simply a large group of disorders with a common dermatosis in the form of bullous exanthem. What should we understand by pemphigus? We should understand by pemphigus what we do understand by it. The word is in the same category with herpes, which to-day means nothing; with pityriasis, which to-day means nothing unless it be defined, and with other names that might be mentioned. Pemphigus, occupies the position in modern dermatology which it should occupy. It no longer designates a disease. We have to distinguish between pemphigus of many forms,

pemphigus pruriginosus, pemphigus vegetans, pemphigus hystericus, pemphigus foliaceus, etc. There is really no such disease as pemphigus. It is merely a term descriptive of a common dermatosis, a common skin symptom of a number of disorders which vary in their influence, cutaneous expression, evolution and involution.

DR. H. RADCLIFFE CROCKER—I am in the habit of teaching my class that just as one swallow does not make a Summer, so one bulla does not make pemphigus. The fact of the matter is there must be successive groups of bullæ. These groups may be one or two at a time, or they may be numerous; they may come out at intervals of a day or of a week or more. The simple feature which runs through all the varieties of pemphigus is that there are successive groups of lesions. The bulla occurs as an accidental thing in every form of dermatitis, in eczema, erythema, urticaria, etc. I do not know of any disease which comes out in successive groups of bullæ except pemphigus, and the disease which we call dermatitis herpetiformis, which is really only a branch of pemphigus, and probably essentially of the same pathology.

As far as we know, the pathology has a direct connection with the nervous system and probably is due to a peripheral nerve-disturbance rather than a central one. However, on this point I do not wish to dogmatize. Arsenic has, in the majority of cases, a controlling but not always a curative influence upon the eruption, and arsenic we know has a definite action on the peripheral ends of nerves.

DR. JOSEPH ZEISLER—I have to say only a few words on the subject of pemphigus. I think we must go a step further than Dr. Hyde has. The word pemphigus has heretofore been used in a slipshod manner to designate most any disease in which bullæ occur. We must try to free ourselves of this gross incorrectness. It is not a lesion which constitutes a disease, otherwise we would have only ten or twelve diseases. If we considered the presence of bullæ as sufficiently characteristic to constitute the diagnosis of pemphigus, we should find that there are a dozen different diseases which would thus be thrown together. It is necessary to separate from pemphigus everything which is already definitely classed under other heads. We have no right to speak of pemphigus syphiliticus. We know of the occurrence of cases of so-called pemphigus in epidemics, pemphigus epidemicus, which does not belong to true pemphigus. Nor have we a right to include in the term pemphigus the form known as pemphigus acutus. I should consider such cases as febris bullosa and place them along with the other acute infectious diseases. One of the chief elements for true pemphigus is the chronicity. As varieties belonging to true pemphigus I should consider pemphigus vulgaris, pemphigus foliaceus and pemphigus vegetans. I do not regard the inflammatory character as essential to pemphigus; whatever there is noticeable of inflammation is of secondary nature. Pemphigus is due to a peculiar cachectic condition of the epidermis, an acantholysis, as Auspitz called it.

DR. HENRY W. STELWAGON—I cannot understand how anyone, who has passed a year or so in Germany or Vienna, can deny the entity of pemphigus. There we see cases we cannot place anywhere else in the classification. The idea which Dr. Crocker and Dr. Zeisler have elaborated is, it seems to me, the correct one, that there still remains a class of cases which we cannot place in any category except pemphigus. I recall the case of a woman who for six or seven years has had irregularly scattered blebs ap-

pearing from time to time over various portions of the body. So far as my knowledge goes this cannot be any other disease than what we have always called pemphigus; and if such cases are not to be called pemphigus what are they?

ELECTION OF OFFICERS.—The following officers were elected: President, Dr. Robert B. Morison, of Baltimore, Md.; Vice-President, Dr. George T. Jackson, of New York; Secretary and Treasurer, Dr. Charles W. Allen, of New York; Member-at-Large of the Council, Dr. J. A. Fordyce, of New York.

On motion, the Association adjourned to meet in Washington, D. C., in connection with the Congress of American Physicians and Surgeons, in May, 1894.

NEW YORK DERMATOLOGICAL SOCIETY.

226TH REGULAR MEETING.

DR. ELLIOT, *President, in the Chair.*

(Concluded from Page 468.)

Pityriasis Rubra Pilaris.—DR. BRONSON presented a case with the following history: The patient was a young man, 24 years of age, a student and a native of this country. Personal and family history as to general health was good. The patient thinks that he has had the same skin disease twice before. The first attack occurred at the age of 5, when a dry, scaly eruption covered nearly the entire body; it lasted through one Winter. The second attack occurred when he was 13 years of age. It was then more generally distributed over the body than at present. He remembers that the hands and feet were markedly swollen. At first it was regarded as eczema by the family physician, and afterwards it was thought to be something more serious. Leprosy was talked of, and for a long time he was kept secluded. For four weeks he was in bed. The attack lasted four months.

The present and third attack began about a month ago, the skin having been perfectly well for eleven years. The eruption showed first about the nose and mouth while the patient was suffering from a "cold," attended with considerable fever. Later on the palms and soles became affected, and some ten days after the back of the neck. Next the eruption appeared on the rump and thighs. At present the face, especially on the forehead, but also on the cheeks, nose and chin, presents a dark red and scaly appearance. At the periphery, where the eruption gradually merges into sound skin, there are multitudes of fine, miliary, red papules with horny summits. The central portions are uniformly red, scaly, and the skin is somewhat thickened. On the back of the neck, extending down upon the shoulders, the horny papules are exceedingly abundant, with a rasping feel to the touch. The palms and soles are very red, scaling (mostly in laminae) and thickened. The backs of the fingers between the joints are studded with the horny papules, occupying, as everywhere, the sites of hair follicles. On the nates and lower part of the back the papules are also numerous. On the elbows and in one or two places about the hips there are small patches covered by white scales that slightly resemble psoriasis. Over the middle

of the sternum is a small group of flattened papules, not scaling, that are hard and slightly umbilicated, and bear considerable resemblance to lichen planus.

DR. SHERWELL considered the case a typical one. He had, however, not been aware that the palms were regularly affected in so pronounced a manner, and did not think it usually occurred; at least, had not seen it in his own cases.

DR. ROBINSON called attention to the papular lesions on the sternal region, which he could not consider resembled those of lichen planus. He did not feel so absolutely sure of the diagnosis of these lesions, although he would say that both forms, lichen ruber as well as lichen planus, were not present in this case.

DR. MORROW thought that the case was a characteristic and typical one of pityriasis rubra pilaris.

DR. FOX said that he saw in the case an exact duplicate of cases which he had formerly demonstrated to the Society, and called particular attention to the lesions on the back of the neck and on the back of the fingers. The disease had nothing in common with lichen planus, and in the present case there were very few lesions which reminded him of that disease. He considered the case identical with the lichen ruber of Hebra.

DR. BRONSON, in answer to a question made by Dr. Elliot, stated that the patient was being treated with arsenic in increasing doses; locally, ichthylol had been applied.

DR. ELLIOT said that in the last six cases of the disease which had come under his observation he had used menthol with much benefit. It was mixed in the proportion of 5 to 6 per cent. with diachylon ointment. It seemed that the menthol allayed the itching, and that with the suppression of the itching and the incidental irritation the lesions disappeared. In one case, which had lasted eight years, the disease had almost entirely disappeared within four weeks under the use of such an ointment.

DR. FOX said he had used lotions containing oil of peppermint in one case he observed years ago in the Skin and Cancer Hospital. The patient preferred them to all other remedies.

DR. BRONSON acknowledged that the papules on the sternal region did not exactly correspond to lichen planus, but said they appeared somewhat different by daylight. Some had polygonal outlines and were distinctly umbilicated; others had a slightly scaly surface, so that a certain similarity with the lesion of lichen planus could not be denied. Still, he thought that this did not affect the correctness of the diagnosis of pityriasis rubra pilaris.

Case of Tuberculosis Cutis.—DR. KLOTZ presented a patient, male, 19 years of age, who showed several lesions of different character. He reported that about one year ago the affection on the right forearm had first made its appearance, and about four months ago those on the hand and eyebrow. The family history as given by the patient does not explain the origin of the disease. On the ulnar aspect of the left forearm a white, smooth scar about the size of a 50-cent piece, with interspersed red nodules, is seen, which does not leave any doubt of its lupus nature. The lesion on the center of back of the left hand, when first seen about three weeks ago, was somewhat larger than a silver dollar and considerably more elevated than

now; it was covered with a thin crust and in the periphery numerous small holes could be seen from which, on pressure, pus freely oozed. After removal of the crusts and application of salicylic acid plaster the peripheral suppuration has largely subsided, the patch has flattened down and now shows a number of irregular ulcers and papillary excrescences. Over the left eye another lesion about the size of a 50-cent piece is seen; a rather hard and resistant wall, almost one third of an inch in length, surrounds, in the shape of a horseshoe, a smaller, deep, ulcerated portion, leaving the lower side without an elevated border. The entire surface is of a dark-red color, glistening and smooth, showing no indentations or irregular loss of substance, nor nodes or nodules in the circumference. This ulcer suggests syphilis rather than tuberculosis, but hardly any change in its appearance had been effected by mixed treatment and mercurial plaster externally. The gums on the left side of the upper maxilla are likewise ulcerated, showing a dark red, irregular granulated surface. The voice of the patient has been quite hoarse for some time; his general health has not been much impaired; the lymphatic glands do not show any enlargement.

DR. LUSTGARTEN thought that the case presented different stages of atrophic, hypertrophic and exulcerant lupus. The patch of the hand did not show the verrucous character of the disease described as tuberculosis verrucosa cutis by Riehl and Paltauf. The appearance of the gums exactly resembled what he had observed frequently in lupus of this locality.

DR. KLOTZ said that the patch on the hand, particularly when he had first seen the patient, presented the features as described by Riehl and Paltauf, particularly the small foci of pus in the peripheral portions, which in the original paper were represented as quite essential. He had been astonished to hear this name applied to affections which did not show the slightest trace of this suppuration. At present some portions of the patch were indeed exulcerated, but others showed the papillary or warty character. The ulcer on the left eyebrow did not exhibit typical features of lupus, particularly not the slightest trace of small nodules or tubercles in the periphery, which, he thought, ought always to be looked for in lupus. The appearance of the ulcer rather suggested syphilis or epithelioma, but he had no doubt that it was, too, of tuberculous nature, but of unusual character.

DR. LUSTGARTEN acknowledged a certain resemblance with the disease described by Riehl and Paltauf.

Case of Lepra.—DR. FOX presented a patient, a young man who had lived in Mexico.

DR. MORROW said that the improvement from treatment noted by Dr. Fox might be due to change of climate and improved conditions of living rather than to the drugs employed. Other observers in countries where leprosy is endemic, who had the opportunity of watching the effect of the same drugs on a larger scale, had found them mostly without any effect. He referred to a case sent to him by Dr. Keyes. Under the use of Chaulmoogra oil in large doses internally and Gurjun oil externally, within three months the tuberculous lesions as well as the anæsthetic patches which had been present had entirely disappeared.

In another case the patient was absolutely unable to tolerate Chaulmoogra oil even in the smallest doses, and did not take anything but moderate doses of strychnia and phosphide of zinc, together with applications of

electricity. Still, the patient had greatly improved, and, as he thought, owing to the more favorable circumstances of the climate, etc.

DR. FOX said that he acknowledged the influence of the climate, etc. In the patient presented by him to-night, however, the disease had developed in this country; therefore, there did not exist a change of climate. He believed that general treatment was of considerable importance.

DR. PIFFARD said that he could not doubt the effectiveness of Chaulmoogra oil in leprosy, as well as that of Hoang-Nan or the nux vomica, which he considered preferable to strychnia. It was not improbable that the effect depended in part on the brucine present in the drug more than on the strychnia.

Report on Cases Presented at Previous Meetings.—DR. MORROW reported that there could be no possible doubt that the lesion on the hard palate was the initial one of syphilis, as no other lesion of entrance had been found. It had healed promptly under specific treatment. The maculopapular syphilide and all the other symptoms, particularly the swelling of the glands, had almost entirely disappeared.

DR. SHERWELL reported that in the case of eczematous disease shown at last meeting the most careful observation of the heart and of the urine since then had not revealed any abnormalities.

DR. SHERWELL had obtained a specimen of the skin of the case of morphaea and had delivered it to Dr. Lustgarten for examination.

DR. LUSTGARTEN reported that the girl with lupus erythematosus was taking phosphorus without apparently any effect.

Report of the Committee on Specimens of Tinea Trichophyton received from Dr. Sabouraud of Paris.

The Committee would report that through the kindness of Dr. Sabouraud, they received cultivation tubes and specimens of the forms of trichophyton, which he has described in his well-known article in the "*Annales de Dermatologie et Syphiligraphie*." After their investigation by us, it gives us pleasure to corroborate the statements brought forward by him, and also to congratulate Dr. Sabouraud upon his success in casting light upon this complicated question. We trust that further original investigations will substantiate the claims advanced by our distinguished confrère.

Selections.

Hydroa Vacciniforme, Bazin. DR. C. BOECK. (*Norsk Magazin for Lægevidenskaben*, No. 6, 1893.)

The writer reports three cases of this rare skin affection, which has been brought to the attention of dermatologists by Jonathan Hutchinson after being first described by Bazin. In the first the patient, a boy of 9 years, had suffered for three consecutive Summers from vesicles and deep bullæ, from the size of a pin point to that of a pea, disseminated symmetrically over the two cheeks, the ears, with traces on the forehead, back and right hand. On the ears especially the vesicles were large and deep, with a slight hemorrhage into the base of each. After having lasted for several days they became depressed in the center and a brownish crust began to

form, ending by covering the whole of the bulla, which, after falling off, left a cicatrix on the skin, often of great depth. Violent itching accompanied the eruption, which this time appeared in May. In the second case, a three-year-old boy, it appeared, for the third Summer, symmetrically on the nose and cheeks, the backs of the hands and the internal side of the forearm. The vesicles were as large as a bean; drying, they formed crusts which, on falling off, left deep cicatrices. The third Spring the eruption developed at the first time that he ventured out. This time his ears were also attacked. At the base of each bulla, which were firm, hard and translucent violet-colored points, as in certain cases of *acne necrotica*, were seen. The third case, a young woman of 27 years, the disease had been observed for the first time the preceding Spring, especially upon the chin and ears, as well as slightly on the extremities and trunk. In this case the eruption would appear after a walk in the open air and even a short promenade. The cicatrices were not as deep as in the other two cases. The process occurring in the skin is similar to that in *acne necrotica*.

FRANK H. PRITCHARD.

Herpes Seu Dermatitis Gestationis. DR. C. BOECK. (*Norsk Magazin for Lægevidenskaben*, No. 6, 1893.)

The author describes a case of this disease in a woman of 28 years, in whom, two days after her second confinement, an eruption appeared on the palms of her hands and the soles of her feet, accompanied by violent itching. During her third pregnancy, when he observed her, it set in at the fifth month and lasting for eight weeks after labor, consisting then of vesicles, large bullæ, papules and erythematous plaques. It was absolutely symmetrical and affected all four extremities and the trunk. During the fourth pregnancy it appeared at the fourth month, by a slight eruption on the forearms. During the fifth pregnancy it reappeared at the third month and persisted for four or five months after labor. The attack this time was more violent and painful, being accompanied by pustules.

FRANK H. PRITCHARD.

Dermatitis Herpetiformis Circumscripta Seu Circinata. DR. C. BOECK. (*Norsk Magazin for Lægevidenskaben*, No. 6, 1893.)

The writer records two cases of a type as yet unmentioned. In the first, a woman of 30 years, on the dorsal surface of each hand there was a circular plaque of the size of a child's hand, with the central portion infiltrated and hyperemic, and this surrounded by a peripheric portion of small translucent vesicles. Similar patches of the size of a hazelnut were on the first phalanges of the fingers, and also were surrounded by small vesicles. Intense itching. It first appeared six years before and had reappeared each Winter. In the second case, a man of 23 years, the affection was less characteristic; the plaques were very similar and had developed each Winter for two Winters, especially on the right hand.

FRANK H. PRITCHARD.

The Functions of the Glands of the Skin. WALLACE BEATTY. (*British Journal of Dermatology*, April, 1893.)

After stating concisely Unna's dictum as to the function of the sweat and sebaceous glands and the origin of subcutaneous fat, the author sets

himself the task of disproving them in part. His investigations and histological research include not only man, but many other species of mammalia, and seem to have been pursued with such care as to give considerable weight to his opinions. He states Unna's opinions in the form of questions, then proceeds to answer them.

1. "Are the sebaceous glands solely for the lubrication of the hairs and not for general oiling of the body?" Part of their function is certainly to furnish oil to the hair, as is evidenced by their intimate connection with the hair follicles; but, on the other hand, their size is often greatly disproportionate to that of the hair, as on the nose in man, the follicles of the spines of the hedgehog, the chin of the cat; and he finds glands which open directly on the surface of the skin, not connected with hairs.

2. "Do the sweat-glands secrete fat?" Unna declares that they, at least, store it up, and granules may be demonstrated by osmic acid stain in the coils, ducts and horny layer of the epidermis; but, in spite of his careful observation, Beatty finds oil drops in coil or duct only in a few isolated instances. The opening of the sweat-duct is generally closely related to the mouth of the hair follicle. This may account for the plugs of blackened matter found in one or two sections. He was never able to discover fat in the secretion of the glands of the palm.

3. "Is the watery sweat derived, not from the coils, but partly from the vessels which surround the duct and partly from the intercellular lymph of the corium?" Physiological research has proved that sweat secretion is independent of dilatation of the capillaries and is under control of the nervous system. The lymph of the intercellular spaces contains albumen, while sweat never does. Moreover, in all the animals whose skin was examined the ducts were found, outside the corium, to have no proper wall.

4. "Is the subcutaneous fat secreted by the sweat-coils?" The amount of fat is never proportionate to the size or number of glands. In the otter, for example, there are no glands discoverable. Unna does not undertake to explain the formation of the fat nor its deposit in other parts of the body.

JOHNSTON.

The Pathogenesis of Diabetes. N. DE DOMINICIS. (*Archives de Méd. Expérimentale et d'Anatomie Pathologique*, July, 1893.)

The author reviews critically the work of others in this field, and Merling, Minkowsky, Hédon, Cantani, the Cavazzani brothers, Lépine, by the light of their own and his investigation (chiefly experimental) and declares that the theory which explains the pathogenesis of glycosuria must place in accord the facts demonstrated by clinical experience and experimentation, and accepted everywhere. After dismissing one by one the theories that the pancreas secretes a special glycolytic ferment which passes in the blood (Minkowski), that of the nervous origin of diabetes (Lancereaux), that of the neuroparalysis of the hepatic plexus (Cavazzani) as insufficiently proved he proceeds to state the facts with which he considers his own theory accords.

The clinical facts are these: 1, Diabetes mellitus and insipidus are capable of transformation, either into the other; 2, an evident hereditary or family predisposition to the disease; 3, the passage of certain diatheses (arthritic, lithæmic, gouty) into diabetes; 4, diabetes, of whatever form, is invariably accompanied by azoturia, phosphaturia and frequently acetonu-

ria; 5, in the bodies of diabetics, the pancreas is found sometimes degenerated, sometimes not and in certain cases destructive alterations of the gland are unaccompanied by diabetes.

Experimentation has demonstrated: 1, that complete extirpation of the pancreas is followed often by diabetes, generally of the graver form and always by cachexia, polyphagia, polyuria, etc., whichever the variety of diabetes; 2, a traumatism of any sort may produce a slight or transitory glycosuria, just as this same traumatism may suspend for a while a pre-existent one. Besides these he mentions diabetes from destruction of the floor of the fourth ventricle, from poisons such as veratrine, curare, from emotions, tabes, hepatic cirrhosis, etc. These forms are neither intense, constant or durable, as is the case in extirpation of the pancreas.

Arriving at his own hypothesis to explain diabetic's glycosuria, de Dominicis reasons that the basis of this pathogenesis "must be the easy decomposition of cellular and alimentary substances," and that these modifications are in perfect accord with the suppression of the pancreatic function. The loss of it is followed by profound cachexia, leading rapidly to death; cell degeneration and decomposition of peptone and cellular albumen must follow such a depression of the vital powers, but since every cachexia is not followed by glycosuria there must be something else capable of determining the production of sugar. This sugar, which appears no matter what the diet, is furnished by the organism as the result of a malassimilative process due to the toxic action of a substance produced by profound changes in the alimentary canal, these changes being consecutive to lack of pancreatic juice, or else to a product of faulty metabolism in the cells themselves or to a combination of both causes. The first he calls *positive poisoning*, the second *negative poisoning*. A special disposition of the cell must be admitted and the nervous system, particularly the part presiding over metabolism, must take part in the complexus because it is abnormally excited and its nutrition impaired by the circulating poisons and because the extraordinary chemical condition of the tissues places them beyond its accustomed control. Finally he remarks that his theory has never found favor with anyone.

JOHNSTON.

The Structures in Cancer and of Paget's Disease Presenting the Appearance of Protozoa. LUDWIG TÖRÖK (*Mon.f. prakt. Dermat.*, March 1893).

On the basis of his researches on cancers of various kinds and of different localization in the skin or the internal organs, Török gives a full description of the morphology and genesis of the cellular elements discovered with respect to their similarity to protozoa and illustrates each by means of an accurate colored plate. The derivation of this appearance of protozoa from the cellular elements of cancer is shown by him, either by means of the comparative morphology of these elements among themselves or with other known forms of degeneration in human cells, or else, by means of their reaction with various reagents. The multiplicity of the methods employed (fixation in alkaline, absolute, 5 per cent. sublimate alcohol, in Flemming and Demarbaix solutions, staining with carmines, hæmatoxylin and safranin) is of great importance in deciding the preceding question. The degenerations of the cellular elements which, he considers, give rise to the likeness to protozoa, are as follows: 1st, vacuole metamorphosis of proto-plasm, with or without inclosure of red or white blood corpuscles or their

derivatives in the protoplasm or its vacuoles; homogeneous metamorphosis of the enclosed cells; 2d, atrophy of the chromatin of nuclei and the formation of vacuole in them, formation of polymorphous, delicate rods of chromatin transformation of the entire nucleus in an intense, diffuse, strained structure which is distributed in little balls and lumps; 3d, changes of the nucleoli in number and size. Through coincidence of these various changes, occurring in the same cells, which may be partly normal and partly degenerated, very complicated pictures will be formed, explanation of which is possible only by mean of comparative morphology and differentiation by staining methods.

JOHNSTON.

Book Review.

Le Pratique de l'Antiseptie dans les Maladies des Voies Urinaires. The Practice of Antisepsis in Diseases of the Urinary Passages. E. DELEFOSSE. (J. B. Baillière et Fils, Paris, 1893.)

This little volume is a careful and thorough résumé of all the most recent work leading toward the perfection of the confessedly unsatisfactory condition of autisepsis as applied to the urinary channels. No point is too small to claim the author's attention, every step in the process being described in full. Wherever necessary to lend clearness to the explanation, cuts are introduced of the various forms of apparatus used in sterilization, lavage, etc.

The first chapter opens with a description of the commoner forms of pathogenic bacteria, and in the second their part in suppuration and in bladder disease is considered. The third treats of bacteriological technique and brings us down to the main object of the work, indicated in the title. Delefosse says in the preface, "I shall be most happy if I have succeeded in familiarizing the important methods of sterilization in this special branch of surgery." He has done it ably. Every antiseptic has its place assigned and its value, with every variety of instrument and in the body, noted. He divides asepsis and antisepsis into external and internal. In external antisepsis, his favorite agents are boric acid, nitrate of silver, normal salt solution (to which he gives a high place) and "microcidine," a compound of caustic soda and naphthol; in internal, salol occupies first place.

Chapter five includes the treatment of gonorrhœa by injection and lavage, then, the special antiseptic and aseptic measures useful in each operation on the urinary organs. The last exhibits the methods practiced on the patient himself, in catheterism, injection and lavage. This volume forms a complete guide as to method and formulæ in all that goes to make up the composite of urinary asepsis and antisepsis.

J. C. J.

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